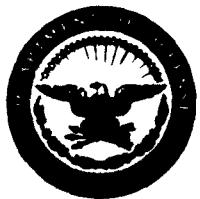


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24 SEPTEMBER 1962

SCATTERING OF LIGHT AT NORMAL INCIDENCE
BY DIELECTRIC CYLINDERS WITH REFRACTIVE INDEX
IN THE RANGE $m = 1.400$ to $m = 3.00$ --
SCATTERING COEFFICIENTS

by:

Louis F. Libelo

ABSTRACT: For the refractive indexes $m = 1.40, 1.50, 1.60, 2.00,$ and 3.00 tables of the complex scattering coefficients are presented. These coefficients arise in the problem of the scattering by a homogeneous, isotropic, dielectric, infinite circular cylinder of normally incident, linearly polarized, plane electromagnetic radiation. The numerical results were obtained by means of the IBM 7090 computer system of the U. S. Naval Ordnance Laboratory. The tables contain not only the scattering coefficients for the incident plane wave polarized parallel to the cylinder axis, but also those for the incident radiation polarized normal to this axis.

For the index of refraction $m = 1.400$ coefficients for the range of the circumference to wavelength ratio, $x = 2\pi a/\lambda, 0.100$ (0.150) 13.150 are included in the tables.

For the index of refraction $m = 1.500$, coefficients for several ranges in x are tabulated, namely, $0.100(0.120)10.900, 11.500$ (0.480) 12.940 and $11.620(0.480)13.060$.

For $m = 1.600$ the ranges in x for which the coefficients have been tabulated are $0.100(0.100)8.200, 8.600(0.600)11.000,$ $8.700(0.600)11.100, 8.800(0.600)10.600$, and $11.800(0.200)12.800$.

For $m = 2.00$ the ranges in x for which the coefficients have been tabulated are $0.100(0.060)5.680, 6.000(0.200)8.000$, and $8.200(0.400)10.200$.

Finally, for the refractive index $m = 3.00$ we have included in the tables the scattering coefficients for x in the ranges 0.100 (0.030) 3.520 and $4.000(0.200)5.400$.

Comparison of the results are made where possible with the somewhat limited results found in the literature.

U. S. NAVAL ORDNANCE LABORATORY
WHITE OAK, MARYLAND

NOLTR 62-161

24 September 1962

This report represents a portion of the results of an investigation of the theory of scattering of electromagnetic radiation by very long isotropic dielectric cylinders. The investigation was carried out as a part of the research program in the Electromagnetics Division of the Physics Research Department of the U. S. Naval Ordnance Laboratory.

To Mrs. J. Hebert and Mrs. S. Madigosky of the U. S. Naval Ordnance Laboratory, the author extends his grateful acknowledgement for their invaluable assistance in both the computational phases of the work and in the preparation of the tables. Acknowledgement is also due to Prof. J. Mayo Greenberg in the Physics Department of Rensselaer Polytechnic Institute for patiently bringing the author to an appreciation of the utility of this work.

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CHAPTER I

GENERAL INTRODUCTION

1. In a previous report¹ a quite comprehensive survey was presented of the literature for the problem of scattering of normally incident, linearly polarized, plane electromagnetic waves by infinite elliptic or circular cylinders. Hence, such a range will not be considered here. We shall merely restrict all discussion to homogeneous isotropic circular cylinders.
2. As is well known, Lord Rayleigh² was the first to present the complete solution for the case of normal incidence on an infinite circular cylinder. At about the same time the solution was also given, independently, by von Ignatowsky.³ Many investigators have looked into this problem since. For an extensive listing, the reader is referred to the previous report¹ mentioned above.
3. Although there has been considerable interest in this scattering problem for quite some time, very few useful numerical results are available in the literature. There is the early work of Seitz⁴ for scattering by a very long gold wire, assuming a circumference to wavelength ratio of 3.000. Larkin and Churchill⁵ obtained some limited numerical values for dielectric cylinders having indexes of refraction $m = 1.5$, 2.0 , and 2.5 . These were produced in the course of an investigation into the scattering properties of the filaments of a porous insulation. Also, one must mention the numerical results obtained by van de Hulst⁶. These include a short table of the complex scattering coefficients for $m = 1.414-1.4141$, or, in other words, a partially conducting cylinder. Practically nothing has been reported in the literature for partially conducting circular cylinders outside of the results of van de Hulst except for a recent paper by the present author.⁷ For dielectric cylinders the present author has published results¹ for $m = 1.150$, 1.200 , 1.250 , and 1.300 . Very recently Farrone, Kerker and Metijević⁸ have also reported on calculations for dielectric cylinders.
4. With the results presented in the accompanying tables and those cited above, it would seem that quite good numerical values are now available in the literature for dielectric cylinders.
5. It would probably be of interest to indicate the utility of the numerical results by pointing out some further applications of previous results. Matijević, Ottewill, and Kerker⁹ used the

numerical values obtained by Larkin and Churchill in their research into the scattering of light by spider fibers. Also, Libelo and Greenberg¹⁰ have looked into the scattering and polarization of light by a cloud of aligned, long dielectric ($m = 1.300$) grains with a prescribed distribution for the radii. The results have been compared with known astrophysical measurements of the wavelength dependence of polarization and extinction of starlight by the interstellar medium.

CHAPTER II

FORMULATION OF THE PROBLEM

6. The mathematical basis and details of the solution of the Maxwell equations for the scattering of linearly polarized, plane electromagnetic waves falling normally on an infinite dielectric circular cylinder has been given by many authors. Included among these are Stratton¹¹, Morse and Feshbach¹², and Mentzer¹³. The reader is referred to these sources for the derivations. Here we shall be content with merely stating the pertinent relations.

7. As has become customary we consider two separate cases. In Case I, referred to as "parallel polarization", the incident wave is polarized parallel to the cylinder axis, whereas in Case II, referred to as "polarization normal to the axis", the magnetic vector of the incident radiation is polarized parallel to the cylinder axis.

8. We assume the cylinder axis coincides with the z-axis and the incident wave is propagating along in the positive direction of the x-axis. In what follows we will use the notation

\mathcal{H} = magnetic field

$Y_N(\kappa)$ = Neumann function of order N

$H_N(\kappa) = J_N(\kappa) - i Y_N(\kappa)$ = Hankel function of the second kind of order N

$k = 2\pi/\lambda$ = the propagation constant of the incident wave

m = index of refraction

a = radius of the cylinder

Case I: Parallel Polarization

9. The external fields ($r > a$) are given by

$$\vec{E}(r, \theta) = (1/mk) \operatorname{curl} \operatorname{curl} \{\vec{u}_z \Psi(r, \theta)\} \quad (1)$$

$$\vec{H}(r, \theta) = -m \operatorname{curl} \{\vec{u}_z \Psi(r, \theta)\} \quad (2)$$

where

$$\Psi(r, \theta) = \sum_{N=-\infty}^{\infty} e^{i(N\theta + \omega t)} (-1)^N [J_N(kr) - B(N) H_N(kr)] \quad (3)$$

and \vec{u}_z is a unit vector along the z-axis. The coefficients are readily found to be

$$B(N) = \frac{m J'_N(y) J_N(x) - J_N(y) J'_N(x)}{m J'_N(y) H_N(x) - J_N(y) H'_N(x)} \quad (4)$$

where $y = mka = mx$. It is also easy to show that

$$B(N) = B(-N). \quad (5)$$

The scattered wave is found for $kr \gg 1$ from

$$\Psi(r, \theta) \rightarrow (z/\pi kr)^{1/2} \exp[-ikr + i\omega t - i3\pi/4] T_1(\theta) \quad (6)$$

where

$$T_1(\theta) = \sum_{N=-\infty}^{\infty} B(N) \exp(iN\theta) = B(0) + 2 \sum_{N=1}^{\infty} B(N) \cos N\theta \quad (7)$$

The quantity $T_1(\theta)$ has a meaning quite similar to the more familiar amplitude function $S(\theta)$ in the case of finite particles.

10. Referring to the definitions reveals that E_z is everywhere proportional to Ψ . Thus, the intensity is proportional to $|\Psi|^2$. Then if I_0 is the intensity of the incident radiation and I the intensity of the radiation scattered in the direction θ at a large distance from the cylinder axis we have

$$I = (z/\pi r k) |\mathcal{T}_1(\theta)|^2 I_0 \quad (8)$$

The extinction efficiency factor per unit length, which is just the scattering efficiency factor since we assumed no conductivity, is given by

$$Q_s = (z/\chi) \{ \operatorname{Re} \mathcal{T}_1(\theta) \} \quad (9)$$

Substituting from equation (6) into equation (9) we find

$$Q_s = (z/\chi) \{ \operatorname{Re} B(0) + z \sum_{N=1}^{\infty} \operatorname{Re} B(N) \} \quad (10)$$

Case II: Normally Polarized Incident Radiation

11. Now the external fields ($r > a$) are given by

$$\vec{E}(r, \theta) = \operatorname{curl} (\vec{u}_z \Psi) \quad (11)$$

$$\vec{H}(r, \theta) = (1/k) \operatorname{curl} \operatorname{curl} (\vec{u}_z \Psi) \quad (12)$$

where the scalar function Ψ is now

$$\Psi(r, \theta) = \sum_{N=-\infty}^{\infty} \exp[iN\theta + i\omega t] (-i)^N [J_N(kr) - A(N) H_N(kr)] \quad (13)$$

and the coefficients are again easily found to be

$$A(N) = \frac{J'_N(y) J_N(x) - m J_{m0}(y) J'_N(x)}{J'_N(y) H_N(x) - m J_N(y) H'_N(x)} \quad (14)$$

where we again see that

$$A(N) = A(-N). \quad (15)$$

The scattered wave, for $kr \gg 1$, is

$$\psi(r, \theta) \rightarrow (z/\pi kr)^{1/2} \exp\{-ikr + i\omega t - i3\pi/4\} T_2(\theta) \quad (16)$$

where

$$T_2(\theta) = \sum_{N=-\infty}^{\infty} A(N) \exp(iN\theta) = A(0) + z \sum_{N=1}^{\infty} A(N) \cos N\theta \quad (17)$$

Just as in the previous case $T_2(\theta)$ has a meaning similar to the amplitude function $S(\theta)$ for finite particles. Corresponding to equations (8) to (10) we have for case II

$$I = (z/\pi r k) |T_2(\theta)|^2 I_0 \quad (18)$$

$$Q_z = (z/\chi) \operatorname{Re}\{T_2(\theta)\} \quad (19)$$

and finally substituting from equation (17) into equation (19) we obtain

$$Q_z = (z/\chi) \left\{ \operatorname{Re} A(0) + z \sum_{N=1}^{\infty} \operatorname{Re} A(N) \right\} \quad (20)$$

CHAPTER III

SUMMARY OF THE NUMERICAL RESULTS

12. To effect the calculation of the complex scattering coefficients tabulated herein a program was constructed for the IBM 7090 computer system at the U. S. Naval Ordnance Laboratory and extensively employed. The procedure may be roughly summarized as follows. For a fixed refractive index, m , a circumference to wavelength ratio x was chosen and the complex coefficients computed for successively larger orders N until the real part of each became less than 10^{-8} . The next higher value of x was chosen and the calculation repeated. This procedure was repeated until the preselected range in x was covered. After this the value of the index of refraction was changed and the whole process was repeated again.

13. Each coefficient was obtained to six significant figures in floating point. This is undoubtedly more than adequate. To minimize any loss due to oscillation of the coefficients with increasing order N the constraint of cutting off the calculation of higher orders when the real part became less than 10^{-8} was found to be quite reasonable. The accompanying tables represent direct output from the IBM 7090 system. For clarification we note here that those entries consisting of only a decimal point preceded by a signed or unsigned zero are to be interpreted as having the value 0.000000.

14. Although the full range in x of the computations was rather more extensive than those presented here it was felt that to include all of the results in this report would make its size somewhat unreasonable. Furthermore, any detailed discussion of the results has been omitted here. Careful consideration of these results will be made in a forthcoming publication.

15. The values obtained for $m = 1.500$ and $m = 2.00$ have been compared with those somewhat more limited ones of Larkin and Churchill¹⁵ and were found to be in quite good agreement.

16. One needs merely look at the expressions in Chapter II to obtain an appreciation of the numerical values of the scattering coefficients $A(N)$ and $B(N)$. With such tables at one's disposal, precise comparisons between analytic approximations and the exact solutions may be readily made. As an example, values of the scattering efficiency factor for $m = 1.500$ have been computed from the coefficients and found to be in good agreement with results obtained from an approximate formula by Montroll and Hart¹⁴ for small x . Furthermore, by interpolation between or extrapolation from the tabulated values the physical quantities defined in Chapter II anywhere in the refractive index range from about 1.400 to about 3.000 may be obtained quite easily.

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Table 1

Real and Imaginary Parts of the Scattering Coefficients
A(N) and B(N) for the Isotropic, Dielectric, Infinite
Circular Cylinder. Refractive Index $m = 1.400$.
Range of circumference to wavelength ratio,
 $x = 2\pi a / \lambda ; 0.100(0.150)13.150$

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|-----------|-----------|-----------|
| 0.100 | 0 | -0. | -0. | 0.0000580 | 0.0076178 |
| | 1 | 0. | 0. | 0. | 0. |
| 0.250 | 0 | 0.0000001 | 0.0003682 | 0.0023869 | 0.0487976 |
| | 1 | 0.0002544 | 0.0159482 | 0.0000001 | 0.0003682 |
| | 2 | 0.0000000 | 0.0001235 | 0. | 0. |
| 0.400 | 0 | 0.0000058 | 0.0024165 | 0.0160774 | 0.1257730 |
| | 1 | 0.0016335 | 0.0403842 | 0.0000058 | 0.0024165 |
| | 2 | 0.0000006 | 0.0008013 | 0. | 0. |
| 0.550 | 0 | 0.0000752 | 0.0086725 | 0.0551971 | 0.2283650 |
| | 1 | 0.0055524 | 0.0743075 | 0.0000752 | 0.0086725 |
| | 2 | 0.0000080 | 0.0028229 | 0.0000000 | 0.0001067 |
| 0.700 | 0 | 0.0005256 | 0.0229194 | 0.1259190 | 0.3317590 |
| | 1 | 0.0133689 | 0.1148490 | 0.0005256 | 0.0229194 |
| | 2 | 0.0000529 | 0.0072717 | 0.0000002 | 0.0004489 |
| | 3 | 0.0000000 | 0.0001484 | 0. | 0. |
| 0.850 | 0 | 0.0025369 | 0.0503042 | 0.2144380 | 0.4104320 |
| | 1 | 0.0256933 | 0.1582190 | 0.0025369 | 0.0503042 |
| | 2 | 0.0002390 | 0.0154574 | 0.0000020 | 0.0014228 |
| | 3 | 0.0000002 | 0.0004650 | 0. | 0. |
| 1.000 | 0 | 0.0095213 | 0.0971113 | 0.2967130 | 0.4568090 |
| | 1 | 0.0420330 | 0.2006650 | 0.0095213 | 0.0971113 |
| | 2 | 0.0008311 | 0.0288174 | 0.0000139 | 0.0037294 |
| | 3 | 0.0000014 | 0.0012002 | 0. | 0. |
| 1.150 | 0 | 0.0294643 | 0.1691040 | 0.3574360 | 0.4792450 |
| | 1 | 0.0611023 | 0.2395180 | 0.0294643 | 0.1691040 |
| | 2 | 0.0023838 | 0.0487661 | 0.0000729 | 0.0085364 |
| | 3 | 0.0000072 | 0.0026931 | 0.0000001 | 0.0002300 |
| 1.300 | 0 | 0.0767664 | 0.2662200 | 0.3943370 | 0.4887080 |
| | 1 | 0.0816205 | 0.2737860 | 0.0767664 | 0.2662200 |
| | 2 | 0.0058810 | 0.0764622 | 0.0003121 | 0.0176650 |
| | 3 | 0.0000295 | 0.0054350 | 0.0000004 | 0.0006003 |
| | 4 | 0.0000000 | 0.0001945 | 0. | 0. |
| 1.450 | 0 | 0.1674200 | 0.3733500 | 0.4122530 | 0.4922400 |
| | 1 | 0.1031240 | 0.3041210 | 0.1674200 | 0.3733500 |
| | 2 | 0.0128151 | 0.1124760 | 0.0011460 | 0.0338333 |
| | 3 | 0.0001019 | 0.0100923 | 0.0000020 | 0.0014064 |
| | 4 | 0.0000002 | 0.0004500 | 0. | 0. |
| 1.600 | 0 | 0.3013400 | 0.4588400 | 0.4180360 | 0.4932360 |
| | 1 | 0.1264860 | 0.3323960 | 0.3013400 | 0.4588400 |
| | 2 | 0.0250900 | 0.1563980 | 0.0037281 | 0.0609442 |
| | 3 | 0.0003072 | 0.0175232 | 0.0000091 | 0.0030218 |
| | 4 | 0.0000009 | 0.0009521 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|-----------|-----------|-----------|
| 1.750 | 0 | 0.4496500 | 0.4974580 | 0.4185800 | 0.4933260 |
| | 1 | 0.1541900 | 0.3611310 | 0.4496500 | 0.4974580 |
| | 2 | 0.0446525 | 0.2065400 | 0.0109917 | 0.1042640 |
| | 3 | 0.0008290 | 0.0287804 | 0.0000366 | 0.0060526 |
| | 4 | 0.0000035 | 0.0018719 | 0.0000001 | 0.0002293 |
| 1.900 | 0 | 0.5757950 | 0.4942220 | 0.4205530 | 0.4936480 |
| | 1 | 0.1905530 | 0.3927370 | 0.5757950 | 0.4942220 |
| | 2 | 0.0728987 | 0.2599700 | 0.0297291 | 0.1698390 |
| | 3 | 0.0020375 | 0.0450924 | 0.0001310 | 0.0114459 |
| | 4 | 0.0000120 | 0.0034602 | 0.0000003 | 0.0005064 |
| 2.050 | 0 | 0.6636500 | 0.4724600 | 0.4307560 | 0.4951820 |
| | 1 | 0.2419090 | 0.4282390 | 0.6636500 | 0.4724600 |
| | 2 | 0.1101470 | 0.3130720 | 0.0736592 | 0.2612160 |
| | 3 | 0.0046182 | 0.0678002 | 0.0004263 | 0.0206427 |
| | 4 | 0.0000369 | 0.0060705 | 0.0000011 | 0.0010498 |
| 2.200 | 0 | 0.7167270 | 0.4505880 | 0.4565810 | 0.4981110 |
| | 1 | 0.3160860 | 0.4649470 | 0.7167270 | 0.4505880 |
| | 2 | 0.1555800 | 0.3624570 | 0.1638910 | 0.3701770 |
| | 3 | 0.0097410 | 0.0982148 | 0.0012831 | 0.0357977 |
| | 4 | 0.0001037 | 0.0101823 | 0.0000042 | 0.0020610 |
| 2.350 | 0 | 0.7448660 | 0.4359360 | 0.5059590 | 0.4999640 |
| | 1 | 0.4193880 | 0.4934590 | 0.7448660 | 0.4359360 |
| | 2 | 0.2078350 | 0.4057580 | 0.3153310 | 0.4646470 |
| | 3 | 0.0192344 | 0.1373480 | 0.0036227 | 0.0600794 |
| | 4 | 0.0002699 | 0.0164273 | 0.0000149 | 0.0038626 |
| 2.500 | 0 | 0.7570970 | 0.4288370 | 0.5851750 | 0.4926920 |
| | 1 | 0.5493130 | 0.4975620 | 0.7570970 | 0.4288370 |
| | 2 | 0.2659400 | 0.4418330 | 0.5068250 | 0.4999530 |
| | 3 | 0.0356733 | 0.1854740 | 0.0096998 | 0.0980086 |
| | 4 | 0.0006566 | 0.0256150 | 0.0000484 | 0.0069554 |
| | 5 | 0.0000043 | 0.0020800 | 0.0000001 | 0.0003614 |
| 2.650 | 0 | 0.7604470 | 0.4268100 | 0.6922960 | 0.4615430 |
| | 1 | 0.6876150 | 0.4634660 | 0.7604470 | 0.4268100 |
| | 2 | 0.3301170 | 0.4702550 | 0.6826100 | 0.4654610 |
| | 3 | 0.0622220 | 0.2415580 | 0.0247986 | 0.1555110 |
| | 4 | 0.0015042 | 0.0387555 | 0.0001465 | 0.0121036 |
| | 5 | 0.0000125 | 0.0035333 | 0.0000005 | 0.0007002 |
| | 6 | 0.0000000 | 0.0002178 | 0. | 0. |

REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|-----------|-----------|-----------|
| 2.800 | 0 | 0.7606850 | 0.4266650 | 0.8089440 | 0.3931330 |
| | 1 | 0.8069510 | 0.3946910 | 0.7606850 | 0.4266650 |
| | 2 | 0.4020220 | 0.4903060 | 0.8050330 | 0.3961750 |
| | 3 | 0.1020590 | 0.3027260 | 0.0604859 | 0.2383850 |
| | 4 | 0.0032676 | 0.0570693 | 0.0004187 | 0.0204586 |
| | 5 | 0.0000337 | 0.0058026 | 0.0000017 | 0.0013044 |
| | 6 | 0.0000002 | 0.0004004 | 0. | 0. |
| 2.950 | 0 | 0.7631640 | 0.4251410 | 0.9054620 | 0.2925760 |
| | 1 | 0.8903340 | 0.3124730 | 0.7631640 | 0.4251410 |
| | 2 | 0.4842210 | 0.4997510 | 0.8760780 | 0.3294930 |
| | 3 | 0.1573890 | 0.3641670 | 0.1385490 | 0.3454750 |
| | 4 | 0.0067640 | 0.0819650 | 0.0011400 | 0.0337449 |
| | 5 | 0.0000855 | 0.0092465 | 0.0000055 | 0.0023471 |
| | 6 | 0.0000005 | 0.0007094 | 0.0000000 | 0.0001239 |
| 3.100 | 0 | 0.7733160 | 0.4186870 | 0.9641560 | 0.1859000 |
| | 1 | 0.9393500 | 0.2386860 | 0.7733160 | 0.4186870 |
| | 2 | 0.5786080 | 0.4937820 | 0.9133080 | 0.2813830 |
| | 3 | 0.2284140 | 0.4198110 | 0.2863940 | 0.4520760 |
| | 4 | 0.0133913 | 0.1149440 | 0.0029831 | 0.0545360 |
| | 5 | 0.0002058 | 0.0143430 | 0.0000168 | 0.0040955 |
| | 6 | 0.0000015 | 0.0012157 | 0.0000001 | 0.0002375 |
| 3.250 | 0 | 0.7965440 | 0.4025690 | 0.9902460 | 0.0982807 |
| | 1 | 0.9649310 | 0.1839530 | 0.7965440 | 0.4025690 |
| | 2 | 0.6835720 | 0.4650820 | 0.9314090 | 0.2527570 |
| | 3 | 0.3129620 | 0.4636990 | 0.5033580 | 0.4999890 |
| | 4 | 0.0254066 | 0.1573570 | 0.0075631 | 0.0866368 |
| | 5 | 0.0004719 | 0.0217189 | 0.0000484 | 0.0069571 |
| | 6 | 0.0000041 | 0.0020222 | 0.0000002 | 0.0004406 |
| 3.400 | 0 | 0.8368930 | 0.3694630 | 0.9984780 | 0.0389857 |
| | 1 | 0.9773210 | 0.1488790 | 0.8368930 | 0.3694630 |
| | 2 | 0.7908390 | 0.4067090 | 0.9391610 | 0.2390350 |
| | 3 | 0.4071530 | 0.4913040 | 0.7243290 | 0.4468520 |
| | 4 | 0.0461969 | 0.2099110 | 0.0187001 | 0.1354640 |
| | 5 | 0.0010368 | 0.0321828 | 0.0001333 | 0.0115438 |
| | 6 | 0.0000107 | 0.0032733 | 0.0000006 | 0.0007928 |
| 3.550 | 0 | 0.8933280 | 0.3086960 | 0.9999730 | 0.0051849 |
| | 1 | 0.9829910 | 0.1293050 | 0.8933280 | 0.3086960 |
| | 2 | 0.8856010 | 0.3182950 | 0.9415290 | 0.2346310 |
| | 3 | 0.5067010 | 0.4999550 | 0.8765430 | 0.3289610 |
| | 4 | 0.0803426 | 0.2718230 | 0.0452042 | 0.2077520 |
| | 5 | 0.0021914 | 0.0467614 | 0.0003525 | 0.0187724 |
| | 6 | 0.0000267 | 0.0051691 | 0.0000019 | 0.0013876 |
| | 7 | 0.0000002 | 0.0004163 | 0. | 0. |

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REFRACTIVE INDEX $N = 1.400$

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 3.700 | 0 | 0.9537630 | 0.2099990 | 0.9998960 | -0.0102051 |
| | 1 | 0.9854650 | 0.1196820 | 0.9537630 | 0.2099990 |
| | 2 | 0.9533880 | 0.2108070 | 0.9417500 | 0.2342160 |
| | 3 | 0.6078790 | 0.4882230 | 0.9530230 | 0.2115890 |
| | 4 | 0.1330930 | 0.3396750 | 0.1060260 | 0.3078700 |
| | 5 | 0.0044732 | 0.0667319 | 0.0009018 | 0.0300170 |
| | 6 | 0.0000637 | 0.0079818 | 0.0000056 | 0.0023688 |
| | 7 | 0.0000005 | 0.0006994 | 0.0000000 | 0.0001489 |
| 3.850 | 0 | 0.9942250 | 0.0757738 | 0.9997860 | -0.0146134 |
| | 1 | 0.9867560 | 0.1143170 | 0.9942250 | 0.0757738 |
| | 2 | 0.9893440 | 0.1026780 | 0.9425300 | 0.2327380 |
| | 3 | 0.7074350 | 0.4549400 | 0.9840470 | 0.1252930 |
| | 4 | 0.2088280 | 0.4064710 | 0.2340780 | 0.4234210 |
| | 5 | 0.0088448 | 0.0936300 | 0.0022465 | 0.0473445 |
| | 6 | 0.0001459 | 0.0120763 | 0.0060156 | 0.0039542 |
| | 7 | 0.0000013 | 0.0011461 | 0.0000001 | 0.0002680 |
| 4.000 | 0 | 0.9952340 | -0.0688741 | 0.9997770 | -0.0149322 |
| | 1 | 0.9883050 | 0.1075100 | 0.9952340 | -0.0688741 |
| | 2 | 0.9999080 | 0.0095974 | 0.9465200 | 0.2249880 |
| | 3 | 0.8015540 | 0.3988300 | 0.9948940 | 0.0712729 |
| | 4 | 0.3085580 | 0.4618980 | 0.4550680 | 0.4979770 |
| | 5 | 0.0169777 | 0.1291880 | 0.0054879 | 0.0738769 |
| | 6 | 0.0003218 | 0.0179369 | 0.0000419 | 0.0064706 |
| | 7 | 0.0000034 | 0.0018357 | 0.0000002 | 0.0004703 |
| | 8 | 0.0000000 | 0.0001421 | 0. | 0. |
| 4.150 | 0 | 0.9620660 | -0.1910370 | 0.9996850 | -0.0177555 |
| | 1 | 0.9912280 | 0.0932495 | 0.9620660 | -0.1910370 |
| | 2 | 0.9961930 | -0.0615851 | 0.9560880 | 0.2048990 |
| | 3 | 0.8846390 | 0.3194570 | 0.9982630 | 0.0416393 |
| | 4 | 0.4277200 | 0.4947480 | 0.7185200 | 0.4497210 |
| | 5 | 0.0316632 | 0.1751020 | 0.0132367 | 0.1142870 |
| | 6 | 0.0006869 | 0.0262004 | 0.0001083 | 0.0104053 |
| | 7 | 0.0000083 | 0.0028789 | 0.0000006 | 0.0008067 |
| | 8 | 0.0000001 | 0.0002406 | 0. | 0. |
| 4.300 | 0 | 0.9173980 | -0.2752790 | 0.9991080 | -0.0298548 |
| | 1 | 0.9957820 | 0.0648064 | 0.9173980 | -0.2752790 |
| | 2 | 0.9873980 | -0.1115500 | 0.9720640 | 0.1647900 |
| | 3 | 0.9492890 | 0.2194070 | 0.9992050 | 0.0281833 |
| | 4 | 0.5562800 | 0.4968220 | 0.9074910 | 0.2897430 |
| | 5 | 0.0573146 | 0.2324430 | 0.0316964 | 0.1751910 |
| | 6 | 0.0014232 | 0.0376981 | 0.0002718 | 0.0164844 |
| | 7 | 0.0000196 | 0.0044286 | 0.0000018 | 0.0013547 |
| | 8 | 0.0000002 | 0.0003983 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 4.450 | 0 | 0.8795630 | -0.3254720 | 0.9965680 | -0.0584809 |
| | 1 | 0.9997830 | 0.0147316 | 0.8795630 | -0.3254720 |
| | 2 | 0.9786360 | -0.1445940 | 0.9907990 | 0.0954804 |
| | 3 | 0.9885810 | 0.1062480 | 0.9994180 | 0.0241225 |
| | 4 | 0.6818140 | 0.4657720 | 0.9857400 | 0.1185620 |
| | 5 | 0.1003230 | 0.3004300 | 0.0753600 | 0.2639710 |
| | 6 | 0.0028710 | 0.0535048 | 0.0006658 | 0.0257943 |
| | 7 | 0.0000448 | 0.0066923 | 0.0000050 | 0.0022317 |
| | 8 | 0.0000004 | 0.0006454 | 0.0000000 | 0.0001594 |
| 4.600 | 0 | 0.8551430 | -0.3519570 | 0.9875720 | -0.1107850 |
| | 1 | 0.9959630 | -0.0634075 | 0.8551430 | -0.3519570 |
| | 2 | 0.9716670 | -0.1659230 | 0.9999010 | -0.009555 |
| | 3 | 0.9999330 | -0.0081670 | 0.9994340 | 0.0237906 |
| | 4 | 0.7934460 | 0.4048330 | 0.9999580 | -0.0064705 |
| | 5 | 0.1685920 | 0.3743910 | 0.1750360 | 0.3799980 |
| | 6 | 0.0056560 | 0.0749932 | 0.0016006 | 0.0399756 |
| | 7 | 0.0000990 | 0.0099493 | 0.0000131 | 0.0036130 |
| | 8 | 0.0000011 | 0.0010255 | 0.0000001 | 0.0002746 |
| 4.750 | 0 | 0.8430510 | -0.3637530 | 0.9622020 | -0.1907070 |
| | 1 | 0.9704310 | -0.1693960 | 0.8430510 | -0.3637530 |
| | 2 | 0.9662360 | -0.1806210 | 0.9782930 | -0.1457250 |
| | 3 | 0.9873470 | -0.1117740 | 0.9995160 | 0.0219863 |
| | 4 | 0.8839400 | 0.3202960 | 0.9929150 | -0.0838764 |
| | 5 | 0.2690570 | 0.4434690 | 0.3758020 | 0.4843290 |
| | 6 | 0.0109085 | 0.1038720 | 0.0038010 | 0.0615347 |
| | 7 | 0.0002124 | 0.0145734 | 0.0000332 | 0.0057591 |
| | 8 | 0.0000026 | 0.0015998 | 0.0000002 | 0.0004637 |
| 4.900 | 9 | 0.0000000 | 0.0001377 | 0. | 0. |
| | 0 | 0.8392100 | -0.3673370 | 0.9059870 | -0.2918470 |
| | 1 | 0.9086210 | -0.2881470 | 0.8392100 | -0.3673370 |
| | 2 | 0.9610200 | -0.1935480 | 0.9113330 | -0.2842630 |
| | 3 | 0.9596240 | -0.1968400 | 0.9998220 | 0.0133418 |
| | 4 | 0.9494050 | 0.2191680 | 0.9834580 | -0.1275470 |
| | 5 | 0.4024200 | 0.4903860 | 0.6695420 | 0.4703780 |
| | 6 | 0.0206346 | 0.1421580 | 0.0089791 | 0.0943317 |
| | 7 | 0.0004438 | 0.0210610 | 0.0000820 | 0.0090556 |
| 5.050 | 8 | 0.0000060 | 0.0024533 | 0.0000006 | 0.0007689 |
| | 9 | 0.0000000 | 0.0002254 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 5.200 | 0 | 0.8373150 | -0.3690780 | 0.6902890 | -0.4623740 |
| | 1 | 0.7010480 | -0.4577990 | 0.8373150 | -0.3690780 |
| | 2 | 0.9421860 | -0.2333920 | 0.7110620 | -0.4532690 |
| | 3 | 0.8938400 | -0.3080420 | 0.9975080 | -0.0498599 |
| | 4 | 0.9999740 | -0.0051292 | 0.9740660 | -0.1589380 |
| | 5 | 0.7121170 | 0.4527760 | 0.9967910 | 0.0565564 |
| | 6 | 0.0696985 | 0.2546380 | 0.0507201 | 0.2194260 |
| | 7 | 0.0018069 | 0.0424698 | 0.0004697 | 0.0216686 |
| | 8 | 0.0000303 | 0.0055074 | 0.0000040 | 0.0020125 |
| | 9 | 0.0000003 | 0.0005714 | 0.0000000 | 0.0001586 |
| 5.350 | 0 | 0.8295730 | -0.3760080 | 0.5745770 | -0.4944070 |
| | 1 | 0.6050330 | -0.4888440 | 0.8295730 | -0.3760080 |
| | 2 | 0.9210520 | -0.2696580 | 0.6326150 | -0.4820930 |
| | 3 | 0.8659780 | -0.3406760 | 0.9857220 | -0.1186360 |
| | 4 | 0.9868460 | -0.1139330 | 0.9732930 | -0.1612250 |
| | 5 | 0.8422990 | 0.3644600 | 0.9880390 | -0.1087120 |
| | 6 | 0.1236590 | 0.3291920 | 0.1216020 | 0.3268260 |
| | 7 | 0.0035419 | 0.0594083 | 0.0010987 | 0.0331279 |
| | 8 | 0.0000653 | 0.0080811 | 0.0000101 | 0.0031855 |
| | 9 | 0.0000008 | 0.0008876 | 0.0000001 | 0.0002645 |
| 5.500 | 0 | 0.8097250 | -0.3925180 | 0.4858470 | -0.4998000 |
| | 1 | 0.5361010 | -0.4986950 | 0.8097250 | -0.3925180 |
| | 2 | 0.8834330 | -0.3209040 | 0.5817290 | -0.4932750 |
| | 3 | 0.8431400 | -0.3636690 | 0.9504200 | -0.2170760 |
| | 4 | 0.9531700 | -0.2112750 | 0.9732300 | -0.1614110 |
| | 5 | 0.9338770 | 0.2484970 | 0.9555730 | -0.2060410 |
| | 6 | 0.2116970 | 0.4085110 | 0.2834290 | 0.4506630 |
| | 7 | 0.0068345 | 0.0823881 | 0.0025498 | 0.0504309 |
| | 8 | 0.0001372 | 0.0117115 | 0.0000248 | 0.0049790 |
| | 9 | 0.0000018 | 0.0013576 | 0.0000002 | 0.0004341 |
| | 10 | 0.0000000 | 0.0001269 | 0. | 0. |
| 5.650 | 0 | 0.7698730 | -0.4209140 | 0.4285800 | -0.4948730 |
| | 1 | 0.4936630 | -0.4999600 | 0.7698730 | -0.4209140 |
| | 2 | 0.8197700 | -0.3843790 | 0.5539320 | -0.4970830 |
| | 3 | 0.8240030 | -0.3808180 | 0.8728760 | -0.3331120 |
| | 4 | 0.9056200 | -0.2923570 | 0.9723460 | -0.1639790 |
| | 5 | 0.9847100 | 0.1227040 | 0.9274930 | -0.2593250 |
| | 6 | 0.3435360 | 0.4748890 | 0.5789060 | 0.4937350 |
| | 7 | 0.0130158 | 0.1133420 | 0.0059133 | 0.0766700 |
| | 8 | 0.0002817 | 0.0167830 | 0.0000592 | 0.0076966 |
| | 9 | 0.0000042 | 0.0020470 | 0.0000005 | 0.0007018 |
| | 10 | 0.0000000 | 0.0002023 | 0. | 0. |

REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|------------|------------|
| 5.800 | 0 | 0.7002000 | -0.4581700 | 0.3970520 | -0.4892870 |
| | 1 | 0.4714290 | -0.4991830 | 0.7002000 | -0.4581700 |
| | 2 | 0.7224690 | -0.4477810 | 0.5420970 | -0.4982250 |
| | 3 | 0.8060750 | -0.3953710 | 0.7470840 | -0.4346830 |
| | 4 | 0.8516720 | -0.3554250 | 0.9688760 | -0.1736540 |
| | 5 | 1.0000000 | -0.0002662 | 0.9094420 | -0.2869800 |
| | 6 | 0.5161620 | 0.4997390 | 0.8862340 | 0.3175260 |
| | 7 | 0.0245145 | 0.1546400 | 0.0138180 | 0.1167350 |
| | 8 | 0.0005672 | 0.0238097 | 0.0001389 | 0.0117868 |
| | 9 | 0.0000093 | 0.0030454 | 0.0000013 | 0.0011189 |
| | 10 | 0.0000001 | 0.0003178 | 0. | 0. |
| 5.950 | 0 | 0.5935200 | -0.4911760 | 0.3831790 | -0.4861610 |
| | 1 | 0.4621870 | -0.4985680 | 0.5935200 | -0.4911760 |
| | 2 | 0.5957700 | -0.4907420 | 0.5392470 | -0.4984570 |
| | 3 | 0.7860020 | -0.4101250 | 0.5981090 | -0.4902800 |
| | 4 | 0.7977910 | -0.4016470 | 0.9601000 | -0.1957250 |
| | 5 | 0.9869780 | -0.1133700 | 0.9000780 | -0.2998970 |
| | 6 | 0.7028180 | 0.4570170 | 0.9991990 | 0.0282869 |
| | 7 | 0.0457073 | 0.2088490 | 0.0328314 | 0.1781950 |
| | 8 | 0.0011221 | 0.0334795 | 0.0003211 | 0.0179165 |
| | 9 | 0.0000200 | 0.0044745 | 0.0000031 | 0.0017612 |
| | 10 | 0.0000002 | 0.0004919 | 0.0000000 | 0.0001499 |
| 6.100 | 0 | 0.4567140 | -0.4981230 | 0.3794540 | -0.4852510 |
| | 1 | 0.4592040 | -0.4983330 | 0.4567140 | -0.4981230 |
| | 2 | 0.4611800 | -0.4984910 | 0.5389690 | -0.4984790 |
| | 3 | 0.7595530 | -0.4273550 | 0.4654150 | -0.4988020 |
| | 4 | 0.7482390 | -0.4340250 | 0.9409160 | -0.2357810 |
| | 5 | 0.9523220 | -0.2130830 | 0.8965450 | -0.3045530 |
| | 6 | 0.8609190 | 0.3460320 | 0.9654260 | -0.1826990 |
| | 7 | 0.0842404 | 0.2777480 | 0.0798301 | 0.2710300 |
| | 8 | 0.0021872 | 0.0467164 | 0.0007345 | 0.0270913 |
| | 9 | 0.0000422 | 0.0064985 | 0.0000075 | 0.0027398 |
| | 10 | 0.0000006 | 0.0007508 | 0.0000001 | 0.0002441 |
| 6.250 | 0 | 0.3172930 | -0.4654230 | 0.3791860 | -0.4851840 |
| | 1 | 0.4561580 | -0.4980740 | 0.3172930 | -0.4654230 |
| | 2 | 0.3450550 | -0.4753860 | 0.5350610 | -0.4987690 |
| | 3 | 0.7214380 | -0.4482920 | 0.3700520 | -0.4828180 |
| | 4 | 0.7048440 | -0.4561130 | 0.9016730 | -0.2977560 |
| | 5 | 0.9018110 | -0.2975700 | 0.8959610 | -0.3053110 |
| | 6 | 0.9601820 | 0.1955320 | 0.9019510 | -0.2973800 |
| | 7 | 0.1524960 | 0.3595010 | 0.1966270 | 0.3974480 |
| | 8 | 0.0042120 | 0.0647635 | 0.0016719 | 0.0408549 |
| | 9 | 0.0000872 | 0.0093385 | 0.00000178 | 0.0042173 |
| | 10 | 0.0000013 | 0.0011311 | 0.0000001 | 0.0003919 |
| | 11 | 0.0000000 | 0.0001129 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|---------|
| 6.400 | 0 | 0.2060230 | -0.4044470 | 0.3760000 | -0.4843800 | |
| | 1 | 0.4467090 | -0.4971520 | 0.2060230 | -0.4044470 | |
| | 2 | 0.2607990 | -0.4390700 | 0.5209970 | -0.4995590 | |
| | 3 | 0.6653740 | -0.4718600 | 0.3109390 | -0.4628780 | |
| | 4 | 0.6674030 | -0.4711440 | 0.8270940 | -0.3781660 | |
| | 5 | 0.8407520 | -0.3659070 | 0.8956460 | -0.3057200 | |
| | 6 | 0.9983360 | 0.0407527 | 0.8516770 | -0.3554200 | |
| | 7 | 0.2670160 | 0.4424010 | 0.4565890 | 0.4981120 | |
| | 8 | 0.0080378 | 0.0892928 | 0.0038132 | 0.0616335 | |
| | 9 | 0.0001767 | 0.0132909 | 0.0000414 | 0.0064322 | |
| | 10 | 0.0000028 | 0.0016831 | 0.0000004 | 0.0006214 | |
| 6.550 | 11 | 0.0000000 | 0.0001765 | 0. | 0. | |
| | 0 | 0.1337550 | -0.3403890 | 0.3633690 | -0.4809700 | |
| | 1 | 0.4241370 | -0.4942110 | 0.1337550 | -0.3403890 | |
| | 2 | 0.2068740 | -0.4050650 | 0.4895270 | -0.4998900 | |
| | 3 | 0.5853800 | -0.4926560 | 0.2785880 | -0.4483040 | |
| | 4 | 0.6342550 | -0.4816380 | 0.7030290 | -0.4569240 | |
| | 5 | 0.7742390 | -0.4180820 | 0.8929110 | -0.3092260 | |
| | 6 | 0.9905720 | -0.0966412 | 0.8197430 | -0.3844010 | |
| | 7 | 0.4395320 | 0.4963300 | 0.8244450 | 0.3804410 | |
| | 8 | 0.0152447 | 0.1225250 | 0.0087886 | 0.0933347 | |
| | 9 | 0.0003518 | 0.0187541 | 0.0000948 | 0.0097346 | |
| 6.700 | 10 | 0.0000061 | 0.0024755 | 0.0000009 | 0.0009735 | |
| | 11 | 0.0000001 | 0.0002723 | 0. | 0. | |
| 6.850 | 0 | 0.0931590 | -0.2906550 | 0.3345350 | -0.4718280 | |
| | 1 | 0.3815400 | -0.4857650 | 0.0931590 | -0.2906550 | |
| | 2 | 0.1754480 | -0.3803490 | 0.4331120 | -0.4955060 | |
| | 3 | 0.4797510 | -0.4995900 | 0.2636750 | -0.4406250 | |
| | 4 | 0.6027380 | -0.4893310 | 0.5368630 | -0.4986390 | |
| | 5 | 0.7069260 | -0.4551720 | 0.8845730 | -0.3195360 | |
| | 6 | 0.9538350 | -0.2098420 | 0.8022490 | -0.3983030 | |
| | 7 | 0.6539320 | 0.4757150 | 0.9985860 | 0.0375704 | |
| | 8 | 0.0288150 | 0.1672860 | 0.0206884 | 0.1423390 | |
| | 9 | 0.0006903 | 0.0262651 | 0.0002145 | 0.0146437 | |
| | 10 | 0.0000130 | 0.0036018 | 0.0000023 | 0.0015085 | |
| | 11 | 0.0000002 | 0.0004150 | 0.0000000 | 0.0001368 | |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|------------|------------|------------|------------|
| 7.000 | 0 | 0.0638643 | -0.2445110 | 0.2093890 | -0.4068720 |
| | 1 | 0.2226630 | -0.4160340 | 0.0638643 | -0.2445110 |
| | 2 | 0.1504060 | -0.3574690 | 0.2370720 | -0.4252870 |
| | 3 | 0.2375580 | -0.4255870 | 0.2584330 | -0.4377730 |
| | 4 | 0.5303860 | -0.4990760 | 0.2380330 | -0.4258800 |
| | 5 | 0.5833980 | -0.4929960 | 0.8300340 | -0.3756030 |
| | 6 | 0.8365180 | -0.3698050 | 0.7921740 | -0.4057520 |
| | 7 | 0.9705440 | 0.1690810 | 0.8440210 | -0.3628350 |
| | 8 | 0.1022880 | 0.3030260 | 0.1274970 | 0.3335290 |
| | 9 | 0.0025677 | 0.0506070 | 0.0010781 | 0.0328172 |
| | 10 | 0.0000548 | 0.0074034 | 0.0000124 | 0.0035187 |
| | 11 | 0.0000009 | 0.0009297 | 0.0000001 | 0.0003446 |
| 7.150 | 0 | 0.06111515 | -0.2396080 | 0.1222080 | -0.3275260 |
| | 1 | 0.1244750 | -0.3301230 | 0.06111515 | -0.2396080 |
| | 2 | 0.1457620 | -0.3528670 | 0.1268300 | -0.3327830 |
| | 3 | 0.1420030 | -0.3490530 | 0.2569970 | -0.4369780 |
| | 4 | 0.4811880 | -0.4996460 | 0.1559050 | -0.3627650 |
| | 5 | 0.5303980 | -0.4990750 | 0.7648750 | -0.4240770 |
| | 6 | 0.7671630 | -0.4226390 | 0.7920070 | -0.4058720 |
| | 7 | 0.9995640 | -0.0208745 | 0.7692600 | -0.4213060 |
| | 8 | 0.1902580 | 0.3925040 | 0.3259230 | 0.4687190 |
| | 9 | 0.0048959 | 0.0697994 | 0.0024220 | 0.0491543 |
| | 10 | 0.0001098 | 0.0104766 | 0.0000282 | 0.0053084 |
| | 11 | 0.0000019 | 0.0013688 | 0.0000003 | 0.0005379 |
| 7.300 | 0 | 0.0609030 | -0.2391520 | 0.0466032 | -0.2107880 |
| | 1 | 0.0467222 | -0.2110430 | 0.0609030 | -0.2391520 |
| | 2 | 0.1404600 | -0.3474640 | 0.0468402 | -0.2112970 |
| | 3 | 0.0786077 | -0.2691250 | 0.2493100 | -0.4326140 |
| | 4 | 0.4178140 | -0.4931990 | 0.1102640 | -0.3132180 |
| | 5 | 0.4830590 | -0.4997130 | 0.6562630 | -0.4749550 |
| | 6 | 0.6948870 | -0.4604550 | 0.7907140 | -0.4067990 |
| | 7 | 0.9679670 | -0.1760880 | 0.7227850 | -0.4476240 |
| | 8 | 0.3418060 | 0.4743150 | 0.7121600 | 0.4527560 |
| | 9 | 0.0093062 | 0.0960187 | 0.0055055 | 0.0739945 |
| | 10 | 0.0002166 | 0.0147148 | 0.0000633 | 0.0079561 |
| | 11 | 0.0000040 | 0.0019948 | 0.0000007 | 0.0008310 |
| 7.450 | 0 | 0.0599711 | -0.2374330 | 0.0060394 | -0.0774786 |
| | 1 | 0.0073026 | -0.0851427 | 0.0599711 | -0.2374330 |
| | 2 | 0.1364080 | -0.3367520 | 0.0086252 | -0.6924708 |
| | 3 | 0.0423169 | -0.2013110 | 0.2298990 | -0.4207680 |
| | 4 | 0.3383230 | -0.4731390 | 0.0870137 | -0.2818550 |
| | 5 | 0.4398850 | -0.4963730 | 0.4991620 | -0.4999990 |
| | 6 | 0.6221150 | -0.4848590 | 0.7848800 | -0.4109050 |
| | 7 | 0.9072250 | -0.2901170 | 0.6967840 | -0.4596480 |
| | 8 | 0.5657720 | 0.4956550 | 0.9916880 | 0.0907881 |
| | 9 | 0.0177005 | 0.1318610 | 0.0128043 | 0.1124290 |
| | 10 | 0.0004218 | 0.0205335 | 0.0001408 | 0.0118647 |
| | 11 | 0.0000083 | 0.0028792 | 0.0000016 | 0.0012714 |
| | 12 | 0.0000001 | 0.0003450 | 0.0000000 | 0.0001216 |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 7.600 | 0 | 0.0552992 | -0.2285630 | 0.0016808 | 0.0409629 |
| | 1 | 0.0003874 | 0.0196790 | 0.0552992 | -0.2285630 |
| | 2 | 0.1119070 | -0.3152520 | 0.0000001 | -0.0003897 |
| | 3 | 0.0235047 | -0.1515000 | 0.1938180 | -0.3952880 |
| | 4 | 0.2460160 | -0.4306880 | 0.0764729 | -0.2657530 |
| | 5 | 0.3986560 | -0.4896220 | 0.3192920 | -0.4662020 |
| | 6 | 0.5511090 | -0.4973810 | 0.7702560 | -0.4206680 |
| | 7 | 0.8358530 | -0.3704090 | 0.6841040 | -0.4648720 |
| | 8 | 0.8099220 | 0.3923630 | 0.9300280 | -0.2551000 |
| | 9 | 0.0338169 | 0.1807570 | 0.0309171 | 0.1730930 |
| | 10 | 0.0008128 | 0.0284985 | 0.0003112 | 0.0176373 |
| | 11 | 0.0000170 | 0.0041187 | 0.0000037 | 0.0019285 |
| | 12 | 0.0000003 | 0.0005135 | 0.0000000 | 0.0001911 |
| 7.750 | 0 | 0.0443220 | -0.2058100 | 0.0163173 | 0.1266930 |
| | 1 | 0.0085958 | 0.0923141 | 0.0443220 | -0.2058100 |
| | 2 | 0.0829044 | -0.2757380 | 0.0035681 | 0.0596266 |
| | 3 | 0.0142588 | -0.1185560 | 0.1393440 | -0.3463060 |
| | 4 | 0.1521960 | -0.3592110 | 0.0728304 | -0.2598580 |
| | 5 | 0.3567090 | -0.4790280 | 0.1676480 | -0.3735530 |
| | 6 | 0.4838110 | -0.4997380 | 0.7408100 | -0.4381900 |
| | 7 | 0.7618530 | -0.4259490 | 0.6794100 | -0.4667030 |
| | 8 | 0.9683680 | 0.1750190 | 0.7893740 | -0.4077530 |
| | 9 | 0.0650819 | 0.2466700 | 0.0788073 | 0.2694380 |
| | 10 | 0.0015539 | 0.0393884 | 0.0006866 | 0.0261939 |
| | 11 | 0.0000341 | 0.0058437 | 0.0000084 | 0.0029026 |
| | 12 | 0.0000006 | 0.0007567 | 0.0000001 | 0.0002973 |
| 7.900 | 0 | 0.0266243 | -0.1609830 | 0.0334325 | 0.1797630 |
| | 1 | 0.0188014 | 0.1358230 | 0.0266243 | -0.1609830 |
| | 2 | 0.0459199 | -0.2093110 | 0.0087608 | 0.0931885 |
| | 3 | 0.0097401 | -0.0982102 | 0.0737642 | -0.2613870 |
| | 4 | 0.0737691 | -0.2613950 | 0.0723066 | -0.2589950 |
| | 5 | 0.3112520 | -0.4630060 | 0.0737740 | -0.2614030 |
| | 6 | 0.4215610 | -0.4938090 | 0.6875680 | -0.4634850 |
| | 7 | 0.6878660 | -0.4633640 | 0.6786160 | -0.4670080 |
| | 8 | 0.9965450 | -0.0586755 | 0.6881720 | -0.4632400 |
| | 9 | 0.1260610 | 0.3319180 | 0.2126800 | 0.4092030 |
| | 10 | 0.0029557 | 0.0542862 | 0.0015214 | 0.0389754 |
| | 11 | 0.0000677 | 0.0082292 | 0.0000188 | 0.0043390 |
| | 12 | 0.0000012 | 0.0011042 | 0.0000002 | 0.0004579 |
| | 13 | 0.0000000 | 0.0001267 | 0. | 0. |

REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 8.050 | 0 | 0.0073299 | -0.0853005 | 0.0453606 | 0.2080940 |
| | 1 | 0.0256530 | 0.1580980 | 0.0073299 | -0.0853005 |
| | 2 | 0.0120288 | -0.1090140 | 0.0119030 | 0.1084500 |
| | 3 | 0.0073270 | -0.0852840 | 0.0185539 | -0.1349430 |
| | 4 | 0.0236141 | -0.1518440 | 0.0718505 | -0.2582400 |
| | 5 | 0.2598800 | -0.4385690 | 0.0285388 | -0.1665060 |
| | 6 | 0.3648980 | -0.4814010 | 0.5984580 | -0.4902100 |
| | 7 | 0.6145120 | -0.4867100 | 0.6782430 | -0.4671500 |
| | 8 | 0.9401150 | -0.2372740 | 0.6274400 | -0.4834860 |
| | 9 | 0.2428160 | 0.4287850 | 0.5525580 | 0.4972300 |
| | 10 | 0.0056145 | 0.0747195 | 0.0034124 | 0.0583163 |
| | 11 | 0.0001325 | 0.0115117 | 0.0000416 | 0.0064502 |
| | 12 | 0.0000025 | 0.0015967 | 0.0000005 | 0.0006990 |
| | 13 | 0.0000000 | 0.0001905 | 0. | 0. |
| 8.200 | 0 | 0.0006345 | 0.0251810 | 0.0511018 | 0.2202050 |
| | 1 | 0.0287016 | 0.1669670 | 0.0006345 | 0.0251810 |
| | 2 | 0.0004361 | 0.0208786 | 0.0129227 | 0.1129410 |
| | 3 | 0.0055720 | -0.0744375 | 0.0002682 | 0.0163735 |
| | 4 | 0.0024330 | -0.0492660 | 0.0685149 | -0.2526270 |
| | 5 | 0.2015480 | -0.4011570 | 0.0103461 | -0.1011880 |
| | 6 | 0.3135360 | -0.4639300 | 0.4637780 | -0.4986860 |
| | 7 | 0.5420490 | -0.4982290 | 0.6748770 | -0.4684210 |
| | 8 | 0.8538820 | -0.3532250 | 0.5935240 | -0.4911750 |
| | 9 | 0.4474410 | 0.4972300 | 0.9611510 | 0.1932360 |
| | 10 | 0.0106954 | 0.1028640 | 0.0078321 | 0.0881521 |
| | 11 | 0.0002564 | 0.0160113 | 0.0000912 | 0.0095482 |
| | 12 | 0.0000052 | 0.0022892 | 0.0000011 | 0.0010583 |
| | 13 | 0.0000001 | 0.0002836 | 0.0000000 | 0.0001059 |
| 8.350 | 0 | 0.0259290 | 0.1589230 | 0.0526280 | 0.2232900 |
| | 1 | 0.0295043 | 0.1692150 | 0.0259290 | 0.1589230 |
| | 2 | 0.0255803 | 0.1578790 | 0.0130019 | 0.1132820 |
| | 3 | 0.0036358 | -0.0601879 | 0.0252416 | 0.1568580 |
| | 4 | 0.0011593 | 0.0340290 | 0.0594698 | -0.2365020 |
| | 5 | 0.1381710 | -0.3450790 | 0.0039171 | -0.0624644 |
| | 6 | 0.2665170 | -0.4421380 | 0.2939110 | -0.4555520 |
| | 7 | 0.4710320 | -0.4991600 | 0.6646120 | -0.4721260 |
| | 8 | 0.7653320 | -0.4237910 | 0.5762350 | -0.4941540 |
| | 9 | 0.7269190 | 0.4455420 | 0.9311070 | -0.2532720 |
| | 10 | 0.0205341 | 0.1418190 | 0.0186777 | 0.1353840 |
| | 11 | 0.0004915 | 0.0221648 | 0.0001988 | 0.0140980 |
| | 12 | 0.0000106 | 0.0032559 | 0.0000025 | 0.0015901 |
| | 13 | 0.0000002 | 0.0004181 | 0.0000000 | 0.0001642 |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 8.500 | 0 | 0.0901038 | 0.2863300 | 0.0527494 | 0.2235330 |
| | 1 | 0.0301447 | 0.1709850 | 0.0901038 | 0.2863300 |
| | 2 | 0.0811197 | 0.2730190 | 0.0135687 | 0.1156920 |
| | 3 | 0.0013466 | -0.0366713 | 0.0732073 | 0.2604770 |
| | 4 | 0.0091213 | 0.0950688 | 0.0429116 | -0.2026580 |
| | 5 | 0.0763390 | -0.2655400 | 0.0018580 | -0.0430642 |
| | 6 | 0.2224620 | -0.4159000 | 0.1348400 | -0.3415520 |
| | 7 | 0.4024290 | -0.4903870 | 0.6423700 | -0.4793020 |
| | 8 | 0.6827420 | -0.4654090 | 0.5689190 | -0.4952270 |
| | 9 | 0.9499340 | 0.2180820 | 0.7430830 | -0.4369330 |
| | 10 | 0.0399501 | 0.1958420 | 0.0472669 | 0.2122090 |
| | 11 | 0.0009357 | 0.0305746 | 0.0004331 | 0.0208057 |
| | 12 | 0.0000211 | 0.0045966 | 0.0000056 | 0.0023728 |
| | 13 | 0.0000004 | 0.0006109 | 0.0000001 | 0.0002524 |
| 8.650 | 0 | 0.1752350 | 0.3801680 | 0.0543972 | 0.2268000 |
| | 1 | 0.0328830 | 0.1783300 | 0.1752350 | 0.3801680 |
| | 2 | 0.1450640 | 0.3521660 | 0.0162701 | 0.1265120 |
| | 3 | 0.0000061 | 0.0024740 | 0.1200660 | 0.3250380 |
| | 4 | 0.0190913 | 0.1368460 | 0.0205510 | -0.1418760 |
| | 5 | 0.0272063 | -0.1626840 | 0.0012881 | -0.0358677 |
| | 6 | 0.1799020 | -0.3841060 | 0.0363073 | -0.1870540 |
| | 7 | 0.3374360 | -0.4728350 | 0.6010440 | -0.4896840 |
| | 8 | 0.6065510 | -0.4885150 | 0.5669850 | -0.4954930 |
| | 9 | 0.9952130 | -0.690197 | 0.6129310 | -0.4870800 |
| | 10 | 0.0791349 | 0.2699490 | 0.1298890 | 0.3361810 |
| | 11 | 0.0017741 | 0.0420833 | 0.0009478 | 0.0307720 |
| | 12 | 0.0000416 | 0.0064460 | 0.0000124 | 0.0035199 |
| | 13 | 0.0000008 | 0.0008850 | 0.0000001 | 0.0003846 |
| | 14 | 0.0000000 | 0.0001053 | 0. | 0. |
| 8.800 | 0 | 0.2544170 | 0.4355330 | 0.0608521 | 0.2390590 |
| | 1 | 0.0406562 | 0.1974930 | 0.2544170 | 0.4355330 |
| | 2 | 0.1989090 | 0.3991800 | 0.0237979 | 0.1524190 |
| | 3 | 0.0040355 | 0.0633974 | 0.1538010 | 0.3607580 |
| | 4 | 0.0278298 | 0.1644850 | 0.0020420 | -0.0451421 |
| | 5 | 0.0020561 | -0.0452977 | 0.0012059 | -0.0347049 |
| | 6 | 0.1377240 | -0.3446100 | 0.0020705 | -0.0454554 |
| | 7 | 0.2771660 | -0.4475990 | 0.5309620 | -0.4990400 |
| | 8 | 0.5350240 | -0.4987720 | 0.5668480 | -0.4955110 |
| | 9 | 0.9139240 | -0.2804760 | 0.5386400 | -0.4985050 |
| | 10 | 0.1595080 | 0.3661490 | 0.3792650 | 0.4852040 |
| | 11 | 0.0033624 | 0.0578890 | 0.0020994 | 0.0457712 |
| | 12 | 0.0000807 | 0.0089854 | 0.0000270 | 0.0051961 |
| | 13 | 0.0000016 | 0.0012713 | 0.0000003 | 0.0005814 |
| | 14 | 0.0000000 | 0.0001566 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 8.950 | 0 | 0.3123580 | 0.4634550 | 0.0767477 | 0.2661910 |
| | 1 | 0.0583735 | 0.2344480 | 0.3123580 | 0.4634550 |
| | 2 | 0.2357320 | 0.4244560 | 0.0416048 | 0.1996840 |
| | 3 | 0.0227659 | 0.1491560 | 0.1730110 | 0.3782570 |
| | 4 | 0.0348091 | 0.1832960 | 0.0077040 | 0.0874337 |
| | 5 | 0.0050551 | 0.0709196 | 0.0011589 | -0.0340228 |
| | 6 | 0.0957955 | -0.2943110 | 0.0032013 | 0.0564894 |
| | 7 | 0.2223660 | -0.4158360 | 0.4220690 | -0.4938890 |
| | 8 | 0.4664070 | -0.4988700 | 0.5652340 | -0.4957260 |
| | 9 | 0.7995390 | -0.4003460 | 0.4979520 | -0.4999960 |
| | 10 | 0.3207510 | 0.4667650 | 0.8728390 | 0.3331530 |
| | 11 | 0.0063974 | 0.0797277 | 0.0047548 | 0.0687911 |
| | 12 | 0.0001553 | 0.0124608 | 0.0000584 | 0.0076428 |
| | 13 | 0.0000033 | 0.0018123 | 0.0000008 | 0.0008723 |
| | 14 | 0.0000001 | 0.0002310 | 0. | 0. |
| 9.100 | 0 | 0.3473290 | 0.4761210 | 0.1096180 | 0.3124130 |
| | 1 | 0.0946103 | 0.2926760 | 0.3473290 | 0.4761210 |
| | 2 | 0.2567710 | 0.4368520 | 0.0798524 | 0.2710640 |
| | 3 | 0.0692239 | 0.2538350 | 0.1811180 | 0.3851160 |
| | 4 | 0.0409871 | 0.1982600 | 0.0581622 | 0.2340500 |
| | 5 | 0.0302289 | 0.1712170 | 0.0008026 | -0.0283195 |
| | 6 | 0.0558294 | -0.2295920 | 0.0146166 | 0.1200120 |
| | 7 | 0.1733010 | -0.3785070 | 0.2749170 | -0.4464730 |
| | 8 | 0.3996580 | -0.4898280 | 0.5586410 | -0.4965490 |
| | 9 | 0.6935130 | -0.4610350 | 0.4768280 | -0.4994630 |
| | 10 | 0.5991070 | 0.4900790 | 0.9499860 | -0.2179740 |
| | 11 | 0.0122857 | 0.1101580 | 0.0111762 | 0.1051250 |
| | 12 | 0.0002962 | 0.0172079 | 0.0001259 | 0.0112183 |
| | 13 | 0.0000066 | 0.0025649 | 0.0000017 | 0.0013001 |
| | 14 | 0.0000001 | 0.0003379 | 0.0000000 | 0.0001392 |
| 9.250 | 0 | 0.3642250 | 0.4812120 | 0.1704960 | 0.3760680 |
| | 1 | 0.1613930 | 0.3678930 | 0.3642250 | 0.4812120 |
| | 2 | 0.2666190 | 0.4421910 | 0.1520870 | 0.3591050 |
| | 3 | 0.1511980 | 0.3582420 | 0.1828880 | 0.3865750 |
| | 4 | 0.0481624 | 0.2141090 | 0.1502850 | 0.3573510 |
| | 5 | 0.0661291 | 0.2485080 | 0.0001336 | -0.0115568 |
| | 6 | 0.0222616 | -0.1475330 | 0.0247735 | 0.1554340 |
| | 7 | 0.1298130 | -0.3360980 | 0.1216310 | -0.3268600 |
| | 8 | 0.3346250 | -0.4718590 | 0.5427900 | -0.4981660 |
| | 9 | 0.6035180 | -0.4891670 | 0.4671760 | -0.4989210 |
| | 10 | 0.9014090 | 0.2981130 | 0.7090560 | -0.4541980 |
| | 11 | 0.0239750 | 0.1529710 | 0.0278742 | 0.1646120 |
| | 12 | 0.0005615 | 0.0236898 | 0.0002711 | 0.0164635 |
| | 13 | 0.0000130 | 0.0036056 | 0.0000037 | 0.0019259 |
| | 14 | 0.0000002 | 0.0004902 | 0.0000000 | 0.0002117 |

REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 9.400 | 0 | 0.3696500 | 0.4827100 | 0.2691530 | 0.4435200 |
| | 1 | 0.2668190 | 0.4422970 | 0.3696500 | 0.4827100 |
| | 2 | 0.2706940 | 0.4443180 | 0.2644370 | 0.4410330 |
| | 3 | 0.2590970 | 0.4381390 | 0.1831720 | 0.3868080 |
| | 4 | 0.0589134 | 0.2354630 | 0.2541060 | 0.4353580 |
| | 5 | 0.1026380 | 0.3034860 | 0.0005422 | 0.0232784 |
| | 6 | 0.0023241 | -0.0481530 | 0.0306983 | 0.1724990 |
| | 7 | 0.0915616 | -0.2884060 | 0.0215537 | -0.1452210 |
| | 8 | 0.2719660 | -0.4449730 | 0.5119860 | -0.4998560 |
| | 9 | 0.5267210 | -0.4992850 | 0.4639550 | -0.4986990 |
| | 10 | 0.9978840 | -0.0459512 | 0.5459320 | -0.4978860 |
| | 11 | 0.0479223 | 0.2136020 | 0.0761612 | 0.2652560 |
| | 12 | 0.0010609 | 0.0325549 | 0.0005868 | 0.0242168 |
| | 13 | 0.0000254 | 0.0050379 | 0.0000081 | 0.0028380 |
| | 14 | 0.0000005 | 0.0007056 | 0.0000001 | 0.0003196 |
| 9.550 | 0 | 0.3701550 | 0.4828460 | 0.4009830 | 0.4900980 |
| | 1 | 0.4007740 | 0.4900550 | 0.3701550 | 0.4828460 |
| | 2 | 0.2744720 | 0.4462480 | 0.4005650 | 0.4900130 |
| | 3 | 0.3686230 | 0.4824310 | 0.1867990 | 0.3897500 |
| | 4 | 0.0770425 | 0.2666590 | 0.3409550 | 0.4740300 |
| | 5 | 0.1341540 | 0.3408170 | 0.0070678 | 0.0837727 |
| | 6 | 0.0039921 | 0.0630571 | 0.0329931 | 0.1786180 |
| | 7 | 0.0583866 | -0.2344730 | 0.0014474 | 0.0380176 |
| | 8 | 0.2129100 | -0.4093650 | 0.4585920 | -0.4982820 |
| | 9 | 0.4586940 | -0.4982910 | 0.4635640 | -0.4986710 |
| | 10 | 0.8953630 | -0.3060850 | 0.4587930 | -0.4982990 |
| | 11 | 0.0988531 | 0.2984650 | 0.2342280 | 0.4235160 |
| | 12 | 0.0020046 | 0.0447276 | 0.0012848 | 0.0358208 |
| | 13 | 0.0000490 | 0.0070007 | 0.0000173 | 0.0041642 |
| | 14 | 0.0000010 | 0.0010079 | 0.0000002 | 0.0004790 |
| | 15 | 0.0000000 | 0.0001276 | 0. | 0. |
| 9.700 | 0 | 0.3720450 | 0.4833500 | 0.5395640 | 0.4984320 |
| | 1 | 0.5336090 | 0.4988690 | 0.3720450 | 0.4833500 |
| | 2 | 0.2835760 | 0.4507340 | 0.5278400 | 0.4992240 |
| | 3 | 0.4588560 | 0.4983040 | 0.1990780 | 0.3993070 |
| | 4 | 0.1083410 | 0.3108100 | 0.4003890 | 0.4899770 |
| | 5 | 0.1592060 | 0.3658680 | 0.0315632 | 0.1748340 |
| | 6 | 0.0315490 | 0.1747960 | 0.0333456 | 0.1795370 |
| | 7 | 0.0307720 | -0.1726990 | 0.0315347 | 0.1747580 |
| | 8 | 0.1589180 | -0.3656000 | 0.3737810 | -0.4838070 |
| | 9 | 0.3957940 | -0.4890210 | 0.4629500 | -0.4986250 |
| | 10 | 0.7487430 | -0.4337360 | 0.4127020 | -0.4923200 |
| | 11 | 0.2102240 | 0.4074680 | 0.6999860 | 0.4582640 |
| | 12 | 0.0038036 | 0.0615557 | 0.0028729 | 0.0535227 |
| | 13 | 0.0000938 | 0.0096830 | 0.0000371 | 0.0060913 |
| | 14 | 0.0000020 | 0.0014298 | 0.0000005 | 0.0007133 |
| | 15 | 0.0000000 | 0.0001869 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 9.850 | 0 | 0.3817750 | 0.4858220 | 0.6544090 | 0.4755610 |
| | 1 | 0.6386660 | 0.4803870 | 0.3817750 | 0.4858220 |
| | 2 | 0.3042830 | 0.4601030 | 0.6235010 | 0.4845070 |
| | 3 | 0.5225200 | 0.4994930 | 0.2267030 | 0.4186990 |
| | 4 | 0.1609100 | 0.3674480 | 0.4348720 | 0.4957400 |
| | 5 | 0.1789460 | 0.3833070 | 0.0926650 | 0.2899620 |
| | 6 | 0.0817313 | 0.2739550 | 0.0336168 | 0.1802410 |
| | 7 | 0.0103579 | -0.1012450 | 0.0729042 | 0.2599790 |
| | 8 | 0.1113550 | -0.3145710 | 0.2536030 | -0.4350730 |
| | 9 | 0.3356180 | -0.4722060 | 0.4590390 | -0.4983190 |
| | 10 | 0.6241370 | -0.4843450 | 0.3887700 | -0.4874710 |
| | 11 | 0.4432220 | 0.4967660 | 0.9822480 | -0.1320500 |
| | 12 | 0.0072872 | 0.0850534 | 0.0066532 | 0.0812953 |
| | 13 | 0.0001780 | 0.0133419 | 0.0000791 | 0.0088946 |
| | 14 | 0.0000041 | 0.0020149 | 0.0000011 | 0.0010557 |
| | 15 | 0.0000001 | 0.0002715 | 0.0000000 | 0.0001166 |
| 10.000 | 0 | 0.4065080 | 0.4911810 | 0.7329960 | 0.4423950 |
| | 1 | 0.7084910 | 0.4544580 | 0.4065080 | 0.4911810 |
| | 2 | 0.3440610 | 0.4750610 | 0.6845770 | 0.4646840 |
| | 3 | 0.5623390 | 0.4960990 | 0.2785460 | 0.4482840 |
| | 4 | 0.2429890 | 0.4288880 | 0.4511710 | 0.4976100 |
| | 5 | 0.1959350 | 0.3969180 | 0.2029380 | 0.4021870 |
| | 6 | 0.1446330 | 0.3517300 | 0.0357435 | 0.1856500 |
| | 7 | 0.0003555 | -0.0188522 | 0.1061840 | 0.3080730 |
| | 8 | 0.0712746 | -0.2572830 | 0.1163270 | -0.3206160 |
| | 9 | 0.2769990 | -0.4475160 | 0.4482560 | -0.4973150 |
| | 10 | 0.5274880 | -0.4992440 | 0.3773400 | -0.4847210 |
| | 11 | 0.8010420 | 0.3992160 | 0.6912040 | -0.4619970 |
| | 12 | 0.0141979 | 0.1183060 | 0.0163028 | 0.1266370 |
| | 13 | 0.0003362 | 0.0183321 | 0.0001687 | 0.0129885 |
| | 14 | 0.0000080 | 0.0028220 | 0.0000024 | 0.0015540 |
| | 15 | 0.0000001 | 0.0003914 | 0.0000000 | 0.0001758 |
| 10.150 | 0 | 0.4543040 | 0.4979080 | 0.7795970 | 0.4145190 |
| | 1 | 0.7490170 | 0.4335790 | 0.4543040 | 0.4979080 |
| | 2 | 0.4111600 | 0.4920440 | 0.7185110 | 0.4497250 |
| | 3 | 0.5846450 | 0.4927830 | 0.3643680 | 0.4812530 |
| | 4 | 0.3559940 | 0.4788130 | 0.4563380 | 0.4980900 |
| | 5 | 0.2135440 | 0.4098080 | 0.3469230 | 0.4759910 |
| | 6 | 0.2089430 | 0.4065530 | 0.0422068 | 0.2010610 |
| | 7 | 0.0054813 | 0.0738329 | 0.1271100 | 0.3330970 |
| | 8 | 0.0394139 | -0.1945780 | 0.0172184 | -0.1300840 |
| | 9 | 0.2199290 | -0.4141980 | 0.4260390 | -0.4945000 |
| | 10 | 0.4511520 | -0.4976080 | 0.3729690 | -0.4835940 |
| | 11 | 0.9995940 | 0.0201509 | 0.4883250 | -0.4998640 |
| | 12 | 0.0283961 | 0.1661020 | 0.0437350 | 0.2045050 |
| | 13 | 0.0006329 | 0.0251498 | 0.0003615 | 0.0190108 |
| | 14 | 0.0000154 | 0.0039302 | 0.0000052 | 0.0022768 |
| | 15 | 0.0000003 | 0.0005601 | 0.0000001 | 0.0002633 |

REFRACTIVE INDEX M = 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 10.300 | 0 | 0.5324830 | 0.4989440 | 0.8036850 | 0.3972100 |
| | 1 | 0.7693060 | 0.4212770 | 0.5324830 | 0.4989440 |
| | 2 | 0.5108980 | 0.4998810 | 0.7342160 | 0.4417500 |
| | 3 | 0.5960780 | 0.4906820 | 0.4874520 | 0.4998430 |
| | 4 | 0.4866720 | 0.4998220 | 0.4568120 | 0.4981310 |
| | 5 | 0.2358300 | 0.4245160 | 0.4859100 | 0.4998010 |
| | 6 | 0.2666660 | 0.4422160 | 0.0571565 | 0.2321420 |
| | 7 | 0.0308003 | 0.1727760 | 0.1376040 | 0.3444830 |
| | 8 | 0.0163785 | -0.1269260 | 0.0072632 | 0.0849144 |
| | 9 | 0.1654190 | -0.3715580 | 0.3863850 | -0.4869210 |
| | 10 | 0.3875180 | -0.4871830 | 0.3720920 | -0.4833630 |
| | 11 | 0.8898210 | -0.3131130 | 0.3887390 | -0.4874640 |
| | 12 | 0.0589917 | 0.2356090 | 0.1350160 | 0.3417410 |
| | 13 | 0.0011918 | 0.0345019 | 0.0007833 | 0.0279759 |
| | 14 | 0.0000297 | 0.0054465 | 0.0000110 | 0.0033233 |
| | 15 | 0.0000006 | 0.0007964 | 0.0000001 | 0.0003918 |
| | 16 | 0.0000000 | 0.0001033 | 0. | 0. |
| 10.450 | 0 | 0.6414830 | 0.4795650 | 0.8136910 | 0.3893560 |
| | 1 | 0.7771900 | 0.4161320 | 0.6414830 | 0.4795650 |
| | 2 | 0.6369080 | 0.4808910 | 0.7391920 | 0.4390750 |
| | 3 | 0.6027890 | 0.4893200 | 0.6321240 | 0.4822270 |
| | 4 | 0.6107950 | 0.4875700 | 0.4586450 | 0.4982870 |
| | 5 | 0.2676900 | 0.4427550 | 0.5917480 | 0.4915100 |
| | 6 | 0.3144480 | 0.4642960 | 0.0883052 | 0.2837380 |
| | 7 | 0.0791918 | 0.2700380 | 0.1412310 | 0.3482600 |
| | 8 | 0.0029692 | -0.0544097 | 0.0689491 | 0.2533680 |
| | 9 | 0.1152680 | -0.3193450 | 0.3220510 | -0.4672620 |
| | 10 | 0.3311190 | -0.4706160 | 0.3719110 | -0.4833150 |
| | 11 | 0.7051090 | -0.4559940 | 0.3386240 | -0.4732420 |
| | 12 | 0.1287920 | 0.3349700 | 0.4764310 | 0.4994440 |
| | 13 | 0.0022536 | 0.0474188 | 0.0017307 | 0.0415660 |
| | 14 | 0.0000565 | 0.0075153 | 0.0000234 | 0.0048373 |
| | 15 | 0.0000013 | 0.0011247 | 0.0000003 | 0.0005794 |
| | 16 | 0.0000000 | 0.0001502 | 0. | 0. |
| 10.600 | 0 | 0.7654700 | 0.4237050 | 0.8161150 | 0.3873910 |
| | 1 | 0.7789620 | 0.4149460 | 0.7654700 | 0.4237050 |
| | 2 | 0.7651770 | 0.4238880 | 0.7396620 | 0.4388190 |
| | 3 | 0.6106190 | 0.4876100 | 0.7648870 | 0.4240700 |
| | 4 | 0.7092150 | 0.4541240 | 0.4680260 | 0.4989770 |
| | 5 | 0.3149760 | 0.4645060 | 0.6601420 | 0.4736610 |
| | 6 | 0.3525250 | 0.4777560 | 0.1486550 | 0.3557480 |
| | 7 | 0.1485340 | 0.3556280 | 0.1416660 | 0.3487080 |
| | 8 | 0.0005315 | 0.0230475 | 0.1484150 | 0.3555110 |
| | 9 | 0.0717035 | -0.2579960 | 0.2277440 | -0.4193760 |
| | 10 | 0.2784300 | -0.4482260 | 0.3697720 | -0.4827430 |
| | 11 | 0.5597780 | -0.4964140 | 0.3129630 | -0.4636990 |
| | 12 | 0.2939840 | 0.4555850 | 0.9991200 | 0.0296488 |
| | 13 | 0.0043018 | 0.0654469 | 0.0039510 | 0.0627326 |
| | 14 | 0.0001068 | 0.0103339 | 0.0000494 | 0.0070313 |
| | 15 | 0.0000025 | 0.0015791 | 0.0000007 | 0.0008524 |
| | 16 | 0.0000000 | 0.0002169 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------|----|------------|------------|-----------|------------|
| 10.750 | 0 | 0.8741020 | 0.3317350 | 0.8163360 | 0.3872100 |
| | 1 | 0.7801210 | 0.4141640 | 0.8741020 | 0.3317350 |
| | 2 | 0.8669550 | 0.3396230 | 0.7413120 | 0.4379140 |
| | 3 | 0.6254440 | 0.4840080 | 0.8600610 | 0.3469240 |
| | 4 | 0.7771710 | 0.4161440 | 0.4917960 | 0.4999330 |
| | 5 | 0.3838470 | 0.4863210 | 0.6990960 | 0.4586510 |
| | 6 | 0.3832100 | 0.4861690 | 0.2533840 | 0.4349490 |
| | 7 | 0.2310790 | 0.4215230 | 0.1424120 | 0.3494730 |
| | 8 | 0.0111805 | 0.1051450 | 0.2132260 | 0.4095860 |
| | 9 | 0.0369657 | -0.1886780 | 0.1119540 | -0.3153090 |
| | 10 | 0.2274830 | -0.4192070 | 0.3627270 | -0.4807870 |
| | 11 | 0.4568730 | -0.4981370 | 0.3004210 | -0.4584410 |
| | 12 | 0.6388230 | 0.4803420 | 0.6946540 | -0.4605540 |
| | 13 | 0.0083475 | 0.0909825 | 0.0095060 | 0.0970341 |
| | 14 | 0.0002009 | 0.0141733 | 0.0001045 | 0.0102221 |
| | 15 | 0.0000049 | 0.0022045 | 0.0000015 | 0.0012479 |
| | 16 | 0.0000001 | 0.0003111 | 0.0000000 | 0.0001448 |
| 10.900 | 0 | 0.9452660 | 0.2274590 | 0.8194260 | 0.3846640 |
| | 1 | 0.7860310 | 0.4101050 | 0.9452660 | 0.2274590 |
| | 2 | 0.9308340 | 0.2537370 | 0.7498450 | 0.4331020 |
| | 3 | 0.6533040 | 0.4759180 | 0.9162080 | 0.2770760 |
| | 4 | 0.8198240 | 0.3843340 | 0.5375570 | 0.4985870 |
| | 5 | 0.4780790 | 0.4995190 | 0.7181850 | 0.4498840 |
| | 6 | 0.4098580 | 0.4918070 | 0.4043470 | 0.4907650 |
| | 7 | 0.3163060 | 0.4650340 | 0.1470680 | 0.3541740 |
| | 8 | 0.0376813 | 0.1904240 | 0.2561050 | 0.4364800 |
| | 9 | 0.0129615 | -0.1131080 | 0.0176298 | -0.1316020 |
| | 10 | 0.1776540 | -0.3822210 | 0.3471360 | -0.4760600 |
| | 11 | 0.3817330 | -0.4858120 | 0.2951970 | -0.4561310 |
| | 12 | 0.9802500 | 0.1391410 | 0.4406090 | -0.4964600 |
| | 13 | 0.0166263 | 0.1278660 | 0.0249097 | 0.1558500 |
| | 14 | 0.0003770 | 0.0194122 | 0.0002219 | 0.0148952 |
| | 15 | 0.0000094 | 0.0030615 | 0.0000033 | 0.0018191 |
| | 16 | 0.0000002 | 0.0004432 | 0.0000000 | 0.0002154 |
| 11.050 | 0 | 0.9805720 | 0.1380240 | 0.8304860 | 0.3752060 |
| | 1 | 0.8020840 | 0.3984280 | 0.9805720 | 0.1380240 |
| | 2 | 0.9642930 | 0.1855580 | 0.7710340 | 0.4201670 |
| | 3 | 0.6997470 | 0.4583680 | 0.9453050 | 0.2273840 |
| | 4 | 0.8448520 | 0.3620460 | 0.6120480 | 0.4872830 |
| | 5 | 0.5937340 | 0.4911350 | 0.7252140 | 0.4464060 |
| | 6 | 0.4363730 | 0.4959350 | 0.5726110 | 0.4947000 |
| | 7 | 0.3951800 | 0.4888890 | 0.1599740 | 0.3665820 |
| | 8 | 0.0827167 | 0.2754540 | 0.2803240 | 0.4491570 |
| | 9 | 0.0011069 | -0.0332515 | 0.0103868 | 0.1013850 |
| | 10 | 0.1295730 | -0.3358330 | 0.3183110 | -0.4658210 |
| | 11 | 0.3229130 | -0.4675900 | 0.2938040 | -0.4555030 |
| | 12 | 0.9021780 | -0.2970740 | 0.3283870 | -0.4696260 |
| | 13 | 0.0344510 | 0.1823850 | 0.0751935 | 0.2637030 |
| | 14 | 0.00067074 | 0.0265882 | 0.0004762 | 0.0218164 |
| | 15 | 0.0000179 | 0.0042323 | 0.0000070 | 0.0026428 |
| | 16 | 0.0000004 | 0.0006274 | 0.0000001 | 0.0003185 |

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REFRACTIVE INDEX $N = 1.400$

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 11.200 | 0 | 0.9942540 | 0.0755860 | 0.8541790 | 0.3529260 |
| | 1 | 0.8329900 | 0.3729850 | 0.9942540 | 0.0755860 |
| | 2 | 0.9798410 | 0.1405430 | 0.8097110 | 0.3925290 |
| | 3 | 0.7673090 | 0.4225470 | 0.9589730 | 0.1983530 |
| | 4 | 0.8589060 | 0.3481190 | 0.7153420 | 0.4512520 |
| | 5 | 0.7152010 | 0.4513190 | 0.7263600 | 0.4458260 |
| | 6 | 0.4670520 | 0.4989130 | 0.7150580 | 0.4513870 |
| | 7 | 0.4626670 | 0.4986040 | 0.1872810 | 0.3901370 |
| | 8 | 0.1474340 | 0.3545380 | 0.2914540 | 0.4544320 |
| | 9 | 0.0024031 | 0.0489621 | 0.0988549 | 0.2984670 |
| | 10 | 0.0850433 | -0.2789460 | 0.2704920 | -0.4442140 |
| | 11 | 0.2731420 | -0.4455730 | 0.2937060 | -0.4554590 |
| | 12 | 0.6717890 | -0.4695620 | 0.2755030 | -0.4467680 |
| | 13 | 0.0756120 | 0.2643760 | 0.2809070 | 0.4494420 |
| | 14 | 0.0013328 | 0.0364837 | 0.0010408 | 0.0322441 |
| | 15 | 0.0000340 | 0.0058275 | 0.0000147 | 0.0038303 |
| | 16 | 0.0000008 | 0.0008828 | 0.0000002 | 0.0004682 |
| | 17 | 0.0000000 | 0.0001203 | 0. | 0. |
| 11.350 | 0 | 0.9984820 | 0.0389370 | 0.8927670 | 0.3094090 |
| | 1 | 0.8802480 | 0.3246710 | 0.9984820 | 0.0389370 |
| | 2 | 0.9864780 | 0.1154970 | 0.8665450 | 0.3400650 |
| | 3 | 0.8502850 | 0.3567920 | 0.9644910 | 0.1850640 |
| | 4 | 0.8671470 | 0.3394160 | 0.8313570 | 0.3744360 |
| | 5 | 0.8209060 | 0.3834310 | 0.7270020 | 0.4455000 |
| | 6 | 0.5065110 | 0.4999580 | 0.8113260 | 0.3912500 |
| | 7 | 0.5176990 | 0.4996870 | 0.2382810 | 0.4260320 |
| | 8 | 0.2297420 | 0.4206670 | 0.2948060 | 0.4559560 |
| | 9 | 0.0176628 | 0.1317220 | 0.2200330 | 0.4142690 |
| | 10 | 0.0468194 | -0.2112520 | 0.1985250 | -0.3988900 |
| | 11 | 0.2279860 | -0.4195340 | 0.2926410 | -0.4549750 |
| | 12 | 0.5020670 | -0.4999960 | 0.2491190 | -0.4325030 |
| | 13 | 0.1788970 | 0.3832660 | 0.9247630 | 0.2637740 |
| | 14 | 0.0025335 | 0.0502696 | 0.0023444 | 0.0483618 |
| | 15 | 0.0000640 | 0.0079980 | 0.0000307 | 0.0055448 |
| | 16 | 0.0000015 | 0.0012353 | 0.0000005 | 0.0006852 |
| | 17 | 0.0000000 | 0.0001728 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 11.500 | 0 | 0.9995360 | 0.0215286 | 0.9417400 | 0.2342340 |
| | 1 | 0.9371070 | 0.2427700 | 0.9995360 | 0.0215286 |
| | 2 | 0.9890010 | 0.1042970 | 0.9321300 | 0.2515220 |
| | 3 | 0.9303190 | 0.2546080 | 0.9659620 | 0.1813270 |
| | 4 | 0.8737860 | 0.3320910 | 0.9284050 | 0.2578160 |
| | 5 | 0.8970160 | 0.3039390 | 0.7324140 | 0.4427000 |
| | 6 | 0.5593350 | 0.4964670 | 0.8674200 | 0.3391200 |
| | 7 | 0.5618500 | 0.4961600 | 0.3253620 | 0.4685100 |
| | 8 | 0.3235630 | 0.4678360 | 0.2950750 | 0.4560770 |
| | 9 | 0.0477189 | 0.2131710 | 0.3218700 | 0.4671930 |
| | 10 | 0.0181834 | -0.1336140 | 0.1052530 | -0.3068790 |
| | 11 | 0.1849000 | -0.3882160 | 0.2882060 | -0.4529270 |
| | 12 | 0.3929490 | -0.4884060 | 0.2361180 | -0.4246950 |
| | 13 | 0.4447670 | 0.4969400 | 0.7271460 | -0.4454270 |
| | 14 | 0.0048908 | 0.0697633 | 0.0055422 | 0.0742393 |
| | 15 | 0.0001199 | 0.0109509 | 0.0000645 | 0.0080289 |
| | 16 | 0.0000030 | 0.0017194 | 0.0000010 | 0.000980 |
| | 17 | 0.0000001 | 0.0002465 | 0.0000000 | 0.0001185 |
| 11.650 | 0 | 0.9997430 | 0.0160195 | 0.9850520 | 0.1213460 |
| | 1 | 0.9845490 | 0.1233370 | 0.9997430 | 0.0160195 |
| | 2 | 0.9898020 | 0.1004690 | 0.9840300 | 0.1253610 |
| | 3 | 0.9835770 | 0.1270950 | 0.9660660 | 0.1810600 |
| | 4 | 0.8825890 | 0.3219090 | 0.9831320 | 0.1287760 |
| | 5 | 0.9436970 | 0.2305050 | 0.7481070 | 0.4341000 |
| | 6 | 0.6288880 | 0.4831020 | 0.8971000 | 0.3038290 |
| | 7 | 0.5980290 | 0.4902960 | 0.4575590 | 0.4981950 |
| | 8 | 0.4201460 | 0.4935820 | 0.2966350 | 0.4567740 |
| | 9 | 0.0934236 | 0.2910250 | 0.3909700 | 0.4879680 |
| | 10 | 0.0023296 | -0.0482100 | 0.0199982 | -0.1399940 |
| | 11 | 0.1427840 | -0.3498520 | 0.2775210 | -0.4477760 |
| | 12 | 0.3195200 | -0.4662910 | 0.2303970 | -0.4210870 |
| | 13 | 0.8983010 | 0.3022520 | 0.4030900 | -0.4905190 |
| | 14 | 0.0096792 | 0.0979059 | 0.0141726 | 0.1182020 |
| | 15 | 0.0002243 | 0.0149749 | 0.0001358 | 0.0116525 |
| | 16 | 0.0000057 | 0.0023818 | 0.0000021 | 0.0014483 |
| | 17 | 0.0000001 | 0.0003497 | 0.0000000 | 0.0001752 |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 11.800 | 0 | 0.9997590 | 0.0155228 | 0.9996660 | -0.0182642 |
| | 1 | 0.9996730 | -0.0180672 | 0.9997590 | 0.0155228 |
| | 2 | 0.9903490 | 0.0977655 | 0.9996810 | -0.0178713 |
| | 3 | 0.9999980 | 0.0014791 | 0.9671060 | 0.1783600 |
| | 4 | 0.8969760 | 0.3039910 | 0.9996330 | 0.0191581 |
| | 5 | 0.9692160 | 0.1727320 | 0.7795120 | 0.4145760 |
| | 6 | 0.7146770 | 0.4515680 | 0.9112490 | 0.2843830 |
| | 7 | 0.6296800 | 0.4828900 | 0.6234370 | 0.4845240 |
| | 8 | 0.5109600 | 0.4998800 | 0.3040560 | 0.4600070 |
| | 9 | 0.1552820 | 0.3621730 | 0.4321870 | 0.4953800 |
| | 10 | 0.0017402 | 0.0416799 | 0.0091734 | 0.0953375 |
| | 11 | 0.1018640 | -0.3024690 | 0.2569480 | -0.4369500 |
| | 12 | 0.2656560 | -0.4416820 | 0.2285820 | -0.4199190 |
| | 13 | 0.9350950 | -0.2463570 | 0.2771290 | -0.4475810 |
| | 14 | 0.0199047 | 0.1396730 | 0.0413907 | 0.1991920 |
| | 15 | 0.0004195 | 0.0204783 | 0.0002889 | 0.0169940 |
| | 16 | 0.0000108 | 0.0032854 | 0.0000044 | 0.0020954 |
| | 17 | 0.0000002 | 0.0004931 | 0.0000001 | 0.0002575 |
| 11.950 | 0 | 0.9998180 | 0.0134955 | 0.9755620 | -0.1544060 |
| | 1 | 0.9770700 | -0.1496810 | 0.9998180 | 0.0134955 |
| | 2 | 0.9918430 | 0.0899476 | 0.9784930 | -0.1450670 |
| | 3 | 0.9901010 | -0.0989998 | 0.9712690 | 0.1670490 |
| | 4 | 0.9193840 | 0.2722450 | 0.9966910 | -0.0574303 |
| | 5 | 0.9822530 | 0.1320300 | 0.8301300 | 0.3755190 |
| | 6 | 0.8088450 | 0.3932110 | 0.9167090 | 0.2763220 |
| | 7 | 0.6604060 | 0.4735710 | 0.7822610 | 0.4127090 |
| | 8 | 0.5902700 | 0.4917840 | 0.3228050 | 0.4675490 |
| | 9 | 0.2327010 | 0.4225530 | 0.4537210 | 0.4978540 |
| | 10 | 0.0177854 | 0.1321710 | 0.1132720 | 0.3169250 |
| | 11 | 0.0637166 | -0.2442470 | 0.2219940 | -0.4155870 |
| | 12 | 0.2222710 | -0.4157720 | 0.2283920 | -0.4197960 |
| | 13 | 0.6521190 | -0.4762980 | 0.2225360 | -0.4159490 |
| | 14 | 0.0433918 | 0.2037380 | 0.1523450 | 0.3593550 |
| | 15 | 0.0007876 | 0.0280528 | 0.0006252 | 0.0249956 |
| | 16 | 0.0000204 | 0.0045150 | 0.0000091 | 0.0030254 |
| | 17 | 0.0000005 | 0.0006915 | 0.0000001 | 0.0003767 |

REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 12.100 | 0 | 0.9999890 | 0.0032739 | 0.9273170 | -0.2596150 |
| | 1 | 0.9341950 | -0.2479400 | 0.9999890 | 0.0032739 |
| | 2 | 0.9950300 | 0.0703219 | 0.9405150 | -0.2365300 |
| | 3 | 0.9710700 | -0.1676090 | 0.9799910 | 0.1400300 |
| | 4 | 0.9494640 | 0.2190470 | 0.9891720 | -0.1034920 |
| | 5 | 0.9887840 | 0.1053100 | 0.8966550 | 0.3044090 |
| | 6 | 0.8956430 | 0.3057230 | 0.9178560 | 0.2745850 |
| | 7 | 0.6937910 | 0.4609180 | 0.8945820 | 0.3070910 |
| | 8 | 0.6559480 | 0.4750580 | 0.3600910 | 0.4800270 |
| | 9 | 0.3231020 | 0.4676610 | 0.4627180 | 0.4986080 |
| | 10 | 0.0506812 | 0.2193460 | 0.2750280 | 0.4465280 |
| | 11 | 0.0312662 | -0.1740360 | 0.1682020 | -0.3740450 |
| | 12 | 0.1842030 | -0.3876500 | 0.2279200 | -0.4194910 |
| | 13 | 0.4519640 | -0.4976870 | 0.1962910 | -0.3971910 |
| | 14 | 0.1031560 | 0.3041630 | 0.6953230 | 0.4602700 |
| | 15 | 0.0014906 | 0.0385796 | 0.0013911 | 0.0372719 |
| | 16 | 0.0000383 | 0.0061860 | 0.0000190 | 0.0043633 |
| | 17 | 0.0000009 | 0.0009646 | 0.0000003 | 0.0005483 |
| | 18 | 0.0000000 | 0.0001370 | 0. | 0. |
| 12.250 | 0 | 0.9995010 | -0.0223373 | 0.8779880 | -0.322990 |
| | 1 | 0.8922840 | -0.3100210 | 0.9995010 | -0.0223373 |
| | 2 | 0.9990100 | 0.0314433 | 0.9052780 | -0.2928300 |
| | 3 | 0.9541700 | -0.2091170 | 0.9920200 | 0.0889743 |
| | 4 | 0.9809440 | 0.1367240 | 0.9835750 | -0.1271040 |
| | 5 | 0.9922240 | 0.0878393 | 0.9621320 | 0.1908760 |
| | 6 | 0.9586470 | 0.1991050 | 0.9180450 | 0.2742960 |
| | 7 | 0.7331430 | 0.4423170 | 0.9553510 | 0.2065310 |
| | 8 | 0.7087340 | 0.4543460 | 0.4253430 | 0.4943950 |
| | 9 | 0.4214620 | 0.4937930 | 0.4648980 | 0.4987660 |
| | 10 | 0.0997357 | 0.2996470 | 0.4172110 | 0.4930980 |
| | 11 | 0.0085370 | -0.0920004 | 0.0956057 | -0.2940500 |
| | 12 | 0.1485310 | -0.3556260 | 0.2252260 | -0.4177310 |
| | 13 | 0.3362620 | -0.4724300 | 0.1833990 | -0.3869930 |
| | 14 | 0.2737230 | 0.4458690 | 0.7993440 | -0.4004910 |
| | 15 | 0.0028620 | 0.0534213 | 0.0032358 | 0.0567916 |
| | 16 | 0.0000715 | 0.0084569 | 0.0000396 | 0.0062958 |
| | 17 | 0.0000018 | 0.0013392 | 0.0000006 | 0.0007954 |
| | 18 | 0.0000000 | 0.0001948 | 0. | 0. |

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REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------|----|-----------|------------|-----------|------------|
| 12.400 | 0 | 0.9949570 | -0.0708334 | 0.8412410 | -0.3654510 |
| | 1 | 0.8622580 | -0.3446290 | 0.9949570 | -0.0708334 |
| | 2 | 0.9988390 | -0.0340539 | 0.8813500 | -0.3233760 |
| | 3 | 0.9432030 | -0.2314540 | 0.9999640 | 0.0059879 |
| | 4 | 0.9994580 | 0.0232713 | 0.9810510 | -0.1363460 |
| | 5 | 0.9944200 | 0.0744894 | 0.9981980 | 0.0424157 |
| | 6 | 0.9914650 | 0.0919886 | 0.9204140 | 0.2706510 |
| | 7 | 0.7808760 | 0.4136530 | 0.9823040 | 0.1318450 |
| | 8 | 0.7509790 | 0.4324460 | 0.5280170 | 0.4992140 |
| | 9 | 0.5209060 | 0.4995630 | 0.4650950 | 0.4987800 |
| | 10 | 0.1636550 | 0.3699630 | 0.5145710 | 0.4997880 |
| | 11 | 0.0000000 | -0.0002034 | 0.0224923 | -0.1482780 |
| | 12 | 0.1138400 | -0.3176170 | 0.2180570 | -0.4129260 |
| | 13 | 0.2648990 | -0.4412800 | 0.1775270 | -0.3821140 |
| | 14 | 0.7180240 | 0.4499620 | 0.3762970 | -0.4844560 |
| | 15 | 0.0056234 | 0.0747785 | 0.0080843 | 0.0895486 |
| | 16 | 0.0001334 | 0.0115474 | 0.0000829 | 0.0091042 |
| | 17 | 0.0000034 | 0.0018510 | 0.0000013 | 0.0011497 |
| | 18 | 0.0000001 | 0.0002752 | 0.0000000 | 0.0001417 |
| 12.550 | 0 | 0.9777070 | -0.1476330 | 0.8197210 | -0.3844200 |
| | 1 | 0.8454620 | -0.3614630 | 0.9777070 | -0.1476330 |
| | 2 | 0.9829620 | -0.1294120 | 0.8689570 | -0.3374470 |
| | 3 | 0.9375870 | -0.2419050 | 0.9878180 | -0.1096980 |
| | 4 | 0.9879510 | -0.1091050 | 0.9805410 | -0.1381330 |
| | 5 | 0.9963850 | 0.0600190 | 0.9880860 | -0.1084990 |
| | 6 | 1.0000000 | 0.0003079 | 0.9280750 | 0.2583630 |
| | 7 | 0.8371880 | 0.3691940 | 0.9927440 | 0.0848720 |
| | 8 | 0.7856410 | 0.4103770 | 0.6678750 | 0.4709760 |
| | 9 | 0.6143750 | 0.4867430 | 0.4678810 | 0.4989670 |
| | 10 | 0.2406770 | 0.4274940 | 0.5735450 | 0.4945620 |
| | 11 | 0.0095385 | 0.0971983 | 0.0056889 | 0.0752102 |
| | 12 | 0.0800090 | -0.2713070 | 0.2036070 | -0.4026800 |
| | 13 | 0.2159630 | -0.4114880 | 0.1754370 | -0.3803410 |
| | 14 | 0.9807710 | -0.1373300 | 0.2341080 | -0.4234400 |
| | 15 | 0.0114531 | 0.1064050 | 0.0227945 | 0.1492480 |
| | 16 | 0.0002487 | 0.0157677 | 0.0001750 | 0.0132264 |
| | 17 | 0.0000065 | 0.0025482 | 0.0000027 | 0.0016572 |
| | 18 | 0.0000001 | 0.0003867 | 0.0000000 | 0.0002072 |

REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------|----|-----------|------------|-----------|------------|
| 12.700 | 0 | 0.9332710 | -0.2495520 | 0.8103190 | -0.3920480 |
| | 1 | 0.8386520 | -0.3678520 | 0.9332710 | -0.2495520 |
| | 2 | 0.9355500 | -0.2455520 | 0.8647080 | -0.3420350 |
| | 3 | 0.9349590 | -0.2465970 | 0.9378760 | -0.2413800 |
| | 4 | 0.9415350 | -0.2346210 | 0.9804020 | -0.1386140 |
| | 5 | 0.9984810 | 0.0389410 | 0.9448590 | -0.2282550 |
| | 6 | 0.9951610 | -0.0693947 | 0.9435380 | 0.2308110 |
| | 7 | 0.8980190 | 0.3026230 | 0.9964290 | 0.0596532 |
| | 8 | 0.8157080 | 0.3877220 | 0.8189210 | 0.3850830 |
| | 9 | 0.6965230 | 0.4597590 | 0.4781630 | 0.4995230 |
| | 10 | 0.3284320 | 0.4696430 | 0.6061060 | 0.4886120 |
| | 11 | 0.0393520 | 0.1944310 | 0.1109970 | 0.3141290 |
| | 12 | 0.0482820 | -0.2143620 | 0.1784230 | -0.3828680 |
| | 13 | 0.1785270 | -0.3829560 | 0.1750990 | -0.3800520 |
| | 14 | 0.6505220 | -0.4768050 | 0.1786350 | -0.3830470 |
| | 15 | 0.0246596 | 0.1550850 | 0.0800835 | 0.2714220 |
| | 16 | 0.0004652 | 0.0215644 | 0.0003753 | 0.0193686 |
| | 17 | 0.0000122 | 0.0034957 | 0.0000057 | 0.0023843 |
| | 18 | 0.0000003 | 0.0005406 | 0.0000001 | 0.0003016 |
| 12.850 | 0 | 0.8498670 | -0.3572020 | 0.8080890 | -0.3938030 |
| | 1 | 0.8372050 | -0.3691790 | 0.8498670 | -0.3572020 |
| | 2 | 0.8499630 | -0.3571070 | 0.8642450 | -0.3425280 |
| | 3 | 0.9324330 | -0.2510020 | 0.8500590 | -0.3570140 |
| | 4 | 0.8747880 | -0.3309590 | 0.9788810 | -0.1437820 |
| | 5 | 0.9999710 | 0.0053623 | 0.8949010 | -0.3066810 |
| | 6 | 0.9857980 | -0.1183220 | 0.9667680 | 0.1792410 |
| | 7 | 0.9535770 | 0.2103990 | 0.9975920 | 0.0490111 |
| | 8 | 0.8439170 | 0.3629340 | 0.9345570 | 0.2473060 |
| | 9 | 0.7647940 | 0.4241270 | 0.5017850 | 0.4999970 |
| | 10 | 0.4236530 | 0.4941370 | 0.6218610 | 0.4849230 |
| | 11 | 0.0893089 | 0.2851890 | 0.3068150 | 0.4611720 |
| | 12 | 0.0214462 | -0.1448660 | 0.1388680 | -0.3458090 |
| | 13 | 0.1468610 | -0.3539670 | 0.1749170 | -0.3798960 |
| | 14 | 0.4100410 | -0.4918410 | 0.1532190 | -0.3601980 |
| | 15 | 0.0579097 | 0.2335730 | 0.4102020 | 0.4918700 |
| | 16 | 0.0008769 | 0.0296000 | 0.0008259 | 0.0287274 |
| | 17 | 0.0000229 | 0.0047821 | 0.0000117 | 0.0034276 |
| | 18 | 0.0000006 | 0.0007522 | 0.0000002 | 0.0004374 |
| | 19 | 0.0000000 | 0.0001084 | 0. | 0. |

REFRACTIVE INDEX M= 1.400

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------|----|-----------|------------|-----------|------------|
| 13.000 | 0 | 0.7352680 | -0.4411900 | 0.8078430 | -0.3939960 |
| | 1 | 0.8363380 | -0.3699680 | 0.7352680 | -0.4411900 |
| | 2 | 0.7422470 | -0.4373970 | 0.8631450 | -0.3436940 |
| | 3 | 0.9268180 | -0.2604350 | 0.7488540 | -0.4336720 |
| | 4 | 0.8090080 | -0.3930830 | 0.9737420 | -0.1599020 |
| | 5 | 0.9978140 | -0.0467007 | 0.8553430 | -0.3517550 |
| | 6 | 0.9766050 | -0.1511530 | 0.9911430 | 0.0936922 |
| | 7 | 0.9905230 | 0.0968890 | 0.9978370 | 0.0464557 |
| | 8 | 0.8725420 | 0.3334860 | 0.9898380 | 0.1002940 |
| | 9 | 0.8192670 | 0.3847970 | 0.5459440 | 0.4978850 |
| | 10 | 0.5219820 | 0.4995170 | 0.6276510 | 0.4834310 |
| | 11 | 0.1570660 | 0.3638630 | 0.4913270 | 0.4999250 |
| | 12 | 0.0038681 | -0.0620735 | 0.0838008 | -0.2770890 |
| | 13 | 0.1178320 | -0.3224090 | 0.1733410 | -0.3785420 |
| | 14 | 0.2868360 | -0.4522840 | 0.1408880 | -0.3479060 |
| | 15 | 0.1553230 | 0.3622130 | 0.9140050 | -0.2803560 |
| | 16 | 0.0016748 | 0.0408904 | 0.0018931 | 0.0434691 |
| | 17 | 0.0000426 | 0.0065284 | 0.0000243 | 0.0049299 |
| | 18 | 0.0000011 | 0.0010419 | 0.0000004 | 0.0006320 |
| | 19 | 0.0000000 | 0.0001534 | 0. | 0. |
| 13.150 | 0 | 0.6178700 | -0.4859080 | 0.8044100 | -0.3966540 |
| | 1 | 0.8311950 | -0.3745790 | 0.6178700 | -0.4859080 |
| | 2 | 0.6407290 | -0.4797870 | 0.8568240 | -0.3502530 |
| | 3 | 0.9141270 | -0.2801770 | 0.6617760 | -0.4731050 |
| | 4 | 0.7574440 | -0.4286290 | 0.9610760 | -0.1934150 |
| | 5 | 0.9849980 | -0.1215620 | 0.8307330 | -0.3749880 |
| | 6 | 0.9690110 | -0.1732870 | 0.9990760 | -0.0303907 |
| | 7 | 0.9994350 | -0.0237543 | 0.9978600 | 0.0462086 |
| | 8 | 0.9030440 | 0.2958980 | 0.9996880 | -0.0176698 |
| | 9 | 0.8617560 | 0.3451560 | 0.6184820 | 0.4857590 |
| | 10 | 0.6182240 | 0.4858220 | 0.6286120 | 0.4831760 |
| | 11 | 0.2368220 | 0.4263640 | 0.6179610 | 0.4858860 |
| | 12 | 0.0010650 | 0.0326241 | 0.0239269 | -0.1528220 |
| | 13 | 0.0898530 | -0.2859710 | 0.1686220 | -0.3744180 |
| | 14 | 0.2177610 | -0.4127240 | 0.1351550 | -0.3418890 |
| | 15 | 0.4789940 | 0.4995590 | 0.3615080 | -0.4804370 |
| | 16 | 0.0032672 | 0.0570659 | 0.0046305 | 0.0678902 |
| | 17 | 0.0000792 | 0.0089020 | 0.0000505 | 0.0071056 |
| | 18 | 0.0000021 | 0.0014370 | 0.0000008 | 0.0009101 |
| | 19 | 0.0000000 | 0.0002159 | 0.0000000 | 0.0001140 |

Table 2

Real and Imaginary Parts of the Scattering Coefficients
A(N) and B(N) for the Isotropic, Dielectric, Infinite
Circular Cylinder. Refractive index $m = 1.400$.
Range of Circumference to wavelength ration,
 $x = 2\pi a/\lambda ; 0.100(0.150)13.150$

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REFRACTIVE INDEX M= 1.500

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|-----------|-----------|-----------|-----------|
| 0.100 | 0 | 0. | 0. | 0. | 0. | 0.0099576 |
| | 1 | 0. | 0. | 0. | 0. | 0. |
| 0.220 | 0 | 0.0000001 | 0.0002882 | 0.0024671 | 0.0496087 | |
| | 1 | 0.0002160 | 0.0146956 | 0.0000001 | 0.0002882 | |
| 0.340 | 0 | 0.0000027 | 0.0016512 | 0.0148026 | 0.1207620 | |
| | 1 | 0.0012248 | 0.0349753 | 0.0000027 | 0.0016512 | |
| | 2 | 0.0000002 | 0.0004989 | 0. | 0. | |
| 0.460 | 0 | 0.0000311 | 0.0055756 | 0.0499131 | 0.2177650 | |
| | 1 | 0.0040069 | 0.0631728 | 0.0000311 | 0.0055756 | |
| | 2 | 0.0000027 | 0.0016571 | 0. | 0. | |
| 0.580 | 0 | 0.0002034 | 0.0142613 | 0.1177370 | 0.3222970 | |
| | 1 | 0.0096682 | 0.0978504 | 0.0002034 | 0.0142613 | |
| | 2 | 0.0000172 | 0.0041427 | 0.0000000 | 0.0001920 | |
| 0.700 | 0 | 0.0009471 | 0.0307609 | 0.2127480 | 0.4092510 | |
| | 1 | 0.0190914 | 0.1368460 | 0.0009471 | 0.0307609 | |
| | 2 | 0.0000753 | 0.0086761 | 0.0000003 | 0.0005904 | |
| | 3 | 0.0000000 | 0.0001764 | 0. | 0. | |
| 0.820 | 0 | 0.0035068 | 0.0591140 | 0.3137740 | 0.4640260 | |
| | 1 | 0.0325950 | 0.1775740 | 0.0035068 | 0.0591140 | |
| | 2 | 0.0002590 | 0.0160923 | 0.0000023 | 0.0015186 | |
| | 3 | 0.0000002 | 0.0004480 | 0. | 0. | |
| 0.940 | 0 | 0.0109920 | 0.1042650 | 0.4000700 | 0.4899120 | |
| | 1 | 0.0498040 | 0.2175400 | 0.0109920 | 0.1042650 | |
| | 2 | 0.0007461 | 0.0273054 | 0.0000118 | 0.0034338 | |
| | 3 | 0.0000010 | 0.0009971 | 0. | 0. | |
| 1.060 | 0 | 0.0301717 | 0.1710590 | 0.4626430 | 0.4986020 | |
| | 1 | 0.0698363 | 0.2548710 | 0.0301717 | 0.1710590 | |
| | 2 | 0.0018744 | 0.0432536 | 0.0000497 | 0.0070484 | |
| | 3 | 0.0000040 | 0.0020066 | 0.0000000 | 0.0001599 | |
| 1.180 | 0 | 0.0733807 | 0.2607600 | 0.5023760 | 0.4999940 | |
| | 1 | 0.0917259 | 0.2886390 | 0.0733807 | 0.2607600 | |
| | 2 | 0.0042184 | 0.0648121 | 0.0001803 | 0.0134273 | |
| | 3 | 0.0000139 | 0.0037309 | 0.0000001 | 0.0003723 | |
| | 4 | 0.0000000 | 0.0001094 | 0. | 0. | |
| 1.300 | 0 | 0.1569040 | 0.3637100 | 0.5242460 | 0.4994120 | |
| | 1 | 0.1148920 | 0.3188910 | 0.1569040 | 0.3637100 | |
| | 2 | 0.0086611 | 0.0926614 | 0.0005822 | 0.0241210 | |
| | 3 | 0.0000423 | 0.0065075 | 0.0000006 | 0.0007977 | |
| | 4 | 0.0000001 | 0.0002317 | 0. | 0. | |
| 1.420 | 0 | 0.2889760 | 0.4532870 | 0.5338760 | 0.4988510 | |
| | 1 | 0.1394980 | 0.3464650 | 0.2889760 | 0.4532870 | |
| | 2 | 0.0164252 | 0.1271040 | 0.0017126 | 0.0413483 | |
| | 3 | 0.0001160 | 0.0107677 | 0.0000025 | 0.0015963 | |
| | 4 | 0.0000002 | 0.0004572 | 0. | 0. | |

REFRACTIVE INDEX M= 1.500

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| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|-----------|-----------|-----------|---------|
| 1.540 | 0 | 0.4517430 | 0.4976660 | 0.5364390 | 0.4986700 | |
| | 1 | 0.1666850 | 0.3726950 | 0.4517430 | 0.4976660 | |
| | 2 | 0.0290155 | 0.1678500 | 0.0046762 | 0.0682229 | |
| | 3 | 0.0002907 | 0.0170468 | 0.0000091 | 0.0030184 | |
| | 4 | 0.0000007 | 0.0008504 | 0. | 0. | |
| 1.660 | 0 | 0.6061730 | 0.4885970 | 0.5366270 | 0.4986570 | |
| | 1 | 0.1987380 | 0.3990500 | 0.6061730 | 0.4885970 | |
| | 2 | 0.0480305 | 0.2138310 | 0.0120121 | 0.1089400 | |
| | 3 | 0.0006760 | 0.0259908 | 0.0000296 | 0.0054431 | |
| | 4 | 0.0000023 | 0.0015040 | 0.0000000 | 0.0001829 | |
| 1.780 | 0 | 0.7236280 | 0.4472030 | 0.5389460 | 0.4984810 | |
| | 1 | 0.2392610 | 0.4266320 | 0.7236280 | 0.4472030 | |
| | 2 | 0.0748469 | 0.2631440 | 0.0292619 | 0.1685400 | |
| | 3 | 0.0014735 | 0.0383575 | 0.0000890 | 0.0094322 | |
| | 4 | 0.0000065 | 0.0025471 | 0.0000001 | 0.0003605 | |
| 1.900 | 0 | 0.8003500 | 0.3997370 | 0.5480640 | 0.4976850 | |
| | 1 | 0.2932980 | 0.4552740 | 0.8003500 | 0.3997370 | |
| | 2 | 0.1102710 | 0.3132270 | 0.0675865 | 0.2510350 | |
| | 3 | 0.0030350 | 0.0550068 | 0.0002499 | 0.0158074 | |
| | 4 | 0.0000172 | 0.0041538 | 0.0000005 | 0.0006790 | |
| 2.020 | 0 | 0.8459670 | 0.3609800 | 0.5690810 | 0.4952050 | |
| | 1 | 0.3669800 | 0.4819810 | 0.8459670 | 0.3609800 | |
| | 2 | 0.1543310 | 0.3612660 | 0.1460080 | 0.3531150 | |
| | 3 | 0.0059442 | 0.0768690 | 0.0006641 | 0.0257608 | |
| | 4 | 0.0000430 | 0.0065542 | 0.0000015 | 0.0012286 | |
| 2.140 | 0 | 0.8712240 | 0.3349520 | 0.6074880 | 0.4883100 | |
| | 1 | 0.4656130 | 0.4988160 | 0.8712240 | 0.3349520 | |
| | 2 | 0.2063630 | 0.4046940 | 0.2856350 | 0.4517170 | |
| | 3 | 0.0111221 | 0.1048730 | 0.0016853 | 0.0410183 | |
| | 4 | 0.0001009 | 0.0100451 | 0.0000046 | 0.0021470 | |
| 2.260 | 0 | 0.8839270 | 0.3203120 | 0.6680830 | 0.4709010 | |
| | 1 | 0.5887800 | 0.4920550 | 0.8839270 | 0.3203120 | |
| | 2 | 0.2654050 | 0.4415490 | 0.4837280 | 0.4997350 | |
| | 3 | 0.0199455 | 0.1398130 | 0.0041221 | 0.0640714 | |
| | 4 | 0.0002252 | 0.0150036 | 0.0000132 | 0.0036390 | |
| 2.380 | 0 | 0.8891760 | 0.3139140 | 0.7515340 | 0.4321230 | |
| | 1 | 0.7237830 | 0.4471250 | 0.8891760 | 0.3139140 | |
| | 2 | 0.3307300 | 0.4704760 | 0.6897060 | 0.4626140 | |
| | 3 | 0.0343456 | 0.1821150 | 0.0097924 | 0.0984708 | |
| | 4 | 0.0004799 | 0.0219019 | 0.0000361 | 0.0060053 | |
| | 5 | 0.0000025 | 0.0015903 | 0.0000001 | 0.0002773 | |

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REFRACTIVE INDEX M= 1.500

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 2.500 | 0 | 0.8904670 | 0.3123070 | 0.8481830 | 0.3588430 | |
| | 1 | 0.8459130 | 0.3610320 | 0.8904670 | 0.3123070 | |
| | 2 | 0.4022550 | 0.4903530 | 0.8435010 | 0.3633280 | |
| | 3 | 0.0568225 | 0.2315030 | 0.0227291 | 0.1490390 | |
| | 4 | 0.0009821 | 0.0313228 | 0.0000938 | 0.0096836 | |
| | 5 | 0.0000063 | 0.0025021 | 0.0000002 | 0.0004882 | |
| 2.620 | 0 | 0.8905760 | 0.3121700 | 0.9350100 | 0.2465090 | |
| | 1 | 0.9328670 | 0.2502520 | 0.8905760 | 0.3121700 | |
| | 2 | 0.4806070 | 0.4996240 | 0.9308210 | 0.2537590 | |
| | 3 | 0.0902733 | 0.2865730 | 0.0516518 | 0.2213230 | |
| | 4 | 0.0019376 | 0.0439757 | 0.0002344 | 0.0153075 | |
| | 5 | 0.0000148 | 0.0038434 | 0.0000007 | 0.0008359 | |
| 2.740 | 0 | 0.8920990 | 0.3102560 | 0.9874660 | 0.1112530 | |
| | 1 | 0.9798780 | 0.1404190 | 0.8920990 | 0.3102560 | |
| | 2 | 0.5666630 | 0.4955360 | 0.9718950 | 0.1652720 | |
| | 3 | 0.1375350 | 0.3444120 | 0.1141100 | 0.3179450 | |
| | 4 | 0.0036993 | 0.0607091 | 0.0005665 | 0.0237953 | |
| | 5 | 0.0000334 | 0.0057768 | 0.0000019 | 0.0013959 | |
| 2.860 | 0 | 0.8976650 | 0.3030890 | 0.9997040 | -0.0172018 | |
| | 1 | 0.9975410 | 0.0495283 | 0.8976650 | 0.3030890 | |
| | 2 | 0.6603820 | 0.4735790 | 0.9889930 | 0.1043360 | |
| | 3 | 0.2006300 | 0.4004720 | 0.2387250 | 0.4263040 | |
| | 4 | 0.0068551 | 0.0825114 | 0.0013329 | 0.0364843 | |
| | 5 | 0.0000725 | 0.0085135 | 0.0000052 | 0.0022796 | |
| 2.980 | 0 | 0.9098180 | 0.2864430 | 0.9859660 | -0.1176320 | |
| | 1 | 0.9997110 | -0.0170018 | 0.9098180 | 0.2864430 | |
| | 2 | 0.7588700 | 0.4277690 | 0.9955340 | 0.0666806 | |
| | 3 | 0.2799060 | 0.4489530 | 0.4472390 | 0.4972080 | |
| | 4 | 0.0123594 | 0.1104840 | 0.0030716 | 0.0553365 | |
| | 5 | 0.0001519 | 0.0123249 | 0.0000133 | 0.0036489 | |
| 3.100 | 0 | 0.9303020 | 0.2546380 | 0.9641520 | -0.1859120 | |
| | 1 | 0.9961920 | -0.0615909 | 0.9303020 | 0.2546380 | |
| | 2 | 0.8543160 | 0.3527890 | 0.9978820 | 0.0459728 | |
| | 3 | 0.3734690 | 0.4837250 | 0.6996240 | 0.4584210 | |
| | 4 | 0.0217153 | 0.1457520 | 0.0069780 | 0.0832425 | |
| | 5 | 0.0003083 | 0.0175566 | 0.0000329 | 0.0057376 | |
| | 6 | 0.0000021 | 0.0014651 | 0.0000001 | 0.0003229 | |

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REFRACTIVE INDEX M= 1.500

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 3.220 | 0 | 0.9582370 | 0.2000460 | 0.9451170 | -0.2277530 | |
| | 1 | 0.9919640 | -0.0892832 | 0.9582370 | 0.2000460 | |
| | 2 | 0.9339270 | 0.2484100 | 0.9986630 | 0.0365441 | |
| | 3 | 0.4772810 | 0.4994840 | 0.8932210 | 0.3088320 | |
| | 4 | 0.0372058 | 0.1892660 | 0.0157279 | 0.1244210 | |
| | 5 | 0.0006078 | 0.0246462 | 0.0000789 | 0.0088830 | |
| | 6 | 0.0000049 | 0.0022114 | 0.0000003 | 0.0005337 | |
| | 7 | 0.0000000 | 0.0001445 | 0. | 0. | |
| 3.340 | 0 | 0.9867720 | 0.1142520 | 0.9325430 | -0.2508120 | |
| | 1 | 0.9888060 | -0.1052100 | 0.9867720 | 0.1142520 | |
| | 2 | 0.9844650 | 0.1236690 | 0.9988620 | 0.0337162 | |
| | 3 | 0.5858860 | 0.4925680 | 0.9816270 | 0.1342950 | |
| | 4 | 0.0621283 | 0.2413880 | 0.0353531 | 0.1846710 | |
| | 5 | 0.0011672 | 0.0341438 | 0.0001842 | 0.0135696 | |
| | 6 | 0.0000108 | 0.0032803 | 0.0000007 | 0.0008651 | |
| | 7 | 0.0000001 | 0.0002310 | 0. | 0. | |
| 3.460 | 0 | 0.9999610 | -0.0062528 | 0.9261200 | -0.2615750 | |
| | 1 | 0.9868510 | -0.1139110 | 0.9999610 | -0.0062528 | |
| | 2 | 0.9999800 | -0.0044250 | 0.9988770 | 0.0334912 | |
| | 3 | 0.6933020 | 0.4611230 | 0.9999930 | -0.0026893 | |
| | 4 | 0.1008970 | 0.3011930 | 0.0793078 | 0.2702190 | |
| | 5 | 0.0021892 | 0.0467379 | 0.0004204 | 0.0204985 | |
| | 6 | 0.0000229 | 0.0047887 | 0.0000019 | 0.0013777 | |
| | 7 | 0.0000001 | 0.0003621 | 0. | 0. | |
| 3.580 | 0 | 0.9770800 | -0.1496480 | 0.9239510 | -0.2650760 | |
| | 1 | 0.9855280 | -0.1194260 | 0.9770800 | -0.1496480 | |
| | 2 | 0.9856800 | -0.1188040 | 0.9989650 | 0.0321473 | |
| | 3 | 0.7935040 | 0.4047910 | 0.9912590 | -0.0930836 | |
| | 4 | 0.1587230 | 0.3654180 | 0.1753140 | 0.3802360 | |
| | 5 | 0.0040208 | 0.0632826 | 0.0009429 | 0.0306927 | |
| | 6 | 0.0000474 | 0.0068883 | 0.0000047 | 0.0021592 | |
| | 7 | 0.0000003 | 0.0005575 | 0.0000000 | 0.0001242 | |
| 3.700 | 0 | 0.9099450 | -0.2862610 | 0.9237260 | -0.2654370 | |
| | 1 | 0.9839720 | -0.1255830 | 0.9099450 | -0.2862610 | |
| | 2 | 0.9538240 | -0.2098650 | 0.9993310 | 0.0258477 | |
| | 3 | 0.8803610 | 0.3245390 | 0.9775690 | -0.1480820 | |
| | 4 | 0.2404270 | 0.4273430 | 0.3648510 | 0.4813880 | |
| | 5 | 0.0072478 | 0.0848247 | 0.0020896 | 0.0456647 | |
| | 6 | 0.0000956 | 0.0097759 | 0.0000111 | 0.0033354 | |
| | 7 | 0.0000007 | 0.000442 | 0.0000000 | 0.0002036 | |
| 3.820 | 0 | 0.8155640 | -0.3878390 | 0.9231110 | -0.2664150 | |
| | 1 | 0.9810670 | -0.1362880 | 0.8155640 | -0.3878390 | |
| | 2 | 0.9165640 | -0.2765400 | 0.9998950 | 0.0102576 | |
| | 3 | 0.9474670 | 0.2230990 | 0.9666500 | -0.1795490 | |
| | 4 | 0.3480700 | 0.4763580 | 0.6494620 | 0.4771380 | |
| | 5 | 0.0128469 | 0.1126140 | 0.0046022 | 0.0676833 | |
| | 6 | 0.0001878 | 0.0137038 | 0.0000259 | 0.0050861 | |
| | 7 | 0.0000016 | 0.0012585 | 0.0000001 | 0.0003283 | |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 3.940 | 0 | 0.7220800 | -0.4479740 | 0.9196840 | -0.2717820 |
| | 1 | 0.9751300 | -0.1557300 | 0.7220800 | -0.4479740 |
| | 2 | 0.8818810 | -0.3227490 | 0.9996090 | -0.0197733 |
| | 3 | 0.9886520 | 0.1059230 | 0.9599850 | -0.1959940 |
| | 4 | 0.4779460 | 0.4995130 | 0.9006900 | 0.290770 |
| | 5 | 0.0224265 | 0.1480660 | 0.0101409 | 0.1001900 |
| | 6 | 0.0003610 | 0.0189958 | 0.0000588 | 0.0076682 |
| | 7 | 0.0000034 | 0.0018490 | 0.0000003 | 0.0005209 |
| 4.060 | 0 | 0.6476970 | -0.4776880 | 0.9105000 | -0.2854640 |
| | 1 | 0.9631830 | -0.1883110 | 0.6476970 | -0.4776880 |
| | 2 | 0.8533430 | -0.3537630 | 0.9950560 | -0.0701374 |
| | 3 | 0.9996670 | -0.0182348 | 0.9568630 | -0.2031660 |
| | 4 | 0.6189210 | 0.4856520 | 0.9968860 | 0.0557144 |
| | 5 | 0.0385862 | 0.1926070 | 0.0225203 | 0.1483680 |
| | 6 | 0.0006799 | 0.0260658 | 0.0001311 | 0.0114493 |
| | 7 | 0.0000072 | 0.0026801 | 0.0000007 | 0.0008146 |
| 4.180 | 0 | 0.5967590 | -0.4905480 | 0.8913060 | -0.3112550 |
| | 1 | 0.9397910 | -0.2378740 | 0.5967590 | -0.4905480 |
| | 2 | 0.8314860 | -0.3743220 | 0.9782130 | -0.1459880 |
| | 3 | 0.9804770 | -0.1383540 | 0.9559650 | -0.2051730 |
| | 4 | 0.7544560 | 0.4304100 | 0.9829150 | -0.1295890 |
| | 5 | 0.0654069 | 0.2472420 | 0.0507345 | 0.2194550 |
| | 6 | 0.0012578 | 0.0354437 | 0.0002877 | 0.0169599 |
| | 7 | 0.0000147 | 0.0038361 | 0.0000016 | 0.0012570 |
| 4.300 | 0 | 0.5660990 | -0.4956120 | 0.8554790 | -0.3516170 |
| | 1 | 0.8959560 | -0.3053180 | 0.5660990 | -0.4956120 |
| | 2 | 0.8151580 | -0.3881690 | 0.9347780 | -0.2469160 |
| | 3 | 0.9363890 | -0.2440580 | 0.9559000 | -0.2053170 |
| | 4 | 0.8680360 | 0.3384510 | 0.9378600 | -0.2414100 |
| | 5 | 0.1089650 | 0.3115950 | 0.1160170 | 0.3202450 |
| | 6 | 0.0022908 | 0.0478072 | 0.0006241 | 0.0249733 |
| | 7 | 0.0000295 | 0.0054269 | 0.0000037 | 0.0019159 |
| 4.420 | 0 | 0.5503940 | -0.4974540 | 0.7936050 | -0.4047170 |
| | 1 | 0.8202760 | -0.3839570 | 0.5503940 | -0.4974540 |
| | 2 | 0.8023740 | -0.3982080 | 0.8484470 | -0.3585870 |
| | 3 | 0.8766830 | -0.3288010 | 0.9553050 | -0.2066340 |
| | 4 | 0.9484260 | 0.2211650 | 0.8968240 | -0.3041890 |
| | 5 | 0.1774200 | 0.3820240 | 0.2632940 | 0.4404210 |
| | 6 | 0.0041160 | 0.0640238 | 0.0013440 | 0.0366355 |
| | 7 | 0.0000577 | 0.0075951 | 0.0000083 | 0.0028879 |
| | 8 | 0.0000005 | 0.0007111 | 0.0000000 | 0.0001971 |

REFRACTIVE INDEX M= 1.500

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| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 4.540 | 0 | 0.5443800 | -0.4980270 | 0.6963910 | -0.4598160 | |
| | 1 | 0.7062510 | -0.4554780 | 0.5443800 | -0.4980270 | |
| | 2 | 0.7907080 | -0.4068030 | 0.7167310 | -0.4505860 | |
| | 3 | 0.8114180 | -0.3911760 | 0.9527050 | -0.2122680 | |
| | 4 | 0.9914610 | 0.0920117 | 0.8678520 | -0.3386520 | |
| | 5 | 0.2795200 | 0.4487630 | 0.5441420 | 0.4980480 | |
| | 6 | 0.0073124 | 0.0851993 | 0.0028897 | 0.0536783 | |
| | 7 | 0.0001108 | 0.0105247 | 0.0000186 | 0.0043099 | |
| | 8 | 0.0000011 | 0.0010372 | 0.0000001 | 0.0003077 | |
| 4.660 | 0 | 0.5433250 | -0.4981190 | 0.5640820 | -0.4958770 | |
| | 1 | 0.5642530 | -0.4958540 | 0.5433250 | -0.4981190 | |
| | 2 | 0.7773680 | -0.4160130 | 0.5644260 | -0.4958320 | |
| | 3 | 0.7485650 | -0.4338380 | 0.9461590 | -0.2257040 | |
| | 4 | 0.9986240 | -0.0370724 | 0.8501040 | -0.3586960 | |
| | 5 | 0.4196660 | 0.4935040 | 0.8691780 | 0.3372060 | |
| | 6 | 0.0128728 | 0.1127260 | 0.0062451 | 0.0787789 | |
| | 7 | 0.0002089 | 0.0144532 | 0.0000407 | 0.0063764 | |
| | 8 | 0.0000022 | 0.0014952 | 0.0000002 | 0.0004746 | |
| 4.780 | 9 | 0.0000000 | 0.0001224 | 0. | 0. | |
| | 0 | 0.5428760 | -0.4981580 | 0.4163510 | -0.4929530 | |
| | 1 | 0.4221890 | -0.4939080 | 0.5428760 | -0.4981580 | |
| | 2 | 0.7590610 | -0.4276530 | 0.4277470 | -0.4947520 | |
| | 3 | 0.6928190 | -0.4613250 | 0.9325520 | -0.2507960 | |
| | 4 | 0.9747040 | -0.1570230 | 0.8407560 | -0.3659040 | |
| | 5 | 0.5893260 | 0.4919560 | 0.9995100 | 0.0221416 | |
| | 6 | 0.0224997 | 0.1483020 | 0.0136785 | 0.1161530 | |
| | 7 | 0.0003877 | 0.0196873 | 0.0000877 | 0.0093646 | |
| 4.900 | 8 | 0.0000045 | 0.0021317 | 0.0000005 | 0.0007237 | |
| | 9 | 0.0000000 | 0.0001839 | 0. | 0. | |
| 5.020 | 0 | 0.5387270 | -0.4984980 | 0.2844140 | -0.4511350 | |
| | 1 | 0.3062570 | -0.4609380 | 0.5387270 | -0.4984980 | |
| | 2 | 0.7317130 | -0.4430680 | 0.3265710 | -0.4689590 | |
| | 3 | 0.6459070 | -0.4782380 | 0.9064230 | -0.2912390 | |
| | 4 | 0.9261170 | -0.2615810 | 0.8369350 | -0.3694250 | |
| | 5 | 0.7614790 | 0.4261790 | 0.9499120 | -0.2181260 | |
| | 6 | 0.0391044 | 0.1938430 | 0.0306642 | 0.1724060 | |
| | 7 | 0.0007093 | 0.0266237 | 0.0001870 | 0.0136727 | |
| | 8 | 0.0000090 | 0.0030079 | 0.0000012 | 0.0010916 | |
| 5.020 | 9 | 0.0000001 | 0.0002728 | 0. | 0. | |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 5.140 | 0 | 0.5001470 | -0.5000000 | 0.1273530 | -0.3333680 |
| | 1 | 0.1743010 | -0.3793680 | 0.5001470 | -0.5000000 |
| | 2 | 0.6283010 | -0.4832590 | 0.2212450 | -0.4150850 |
| | 3 | 0.5760360 | -0.4941850 | 0.7754230 | -0.4173030 |
| | 4 | 0.7837980 | -0.4116540 | 0.8359770 | -0.3702970 |
| | 5 | 0.9796990 | 0.1410290 | 0.7908970 | -0.4066680 |
| | 6 | 0.1160640 | 0.3203020 | 0.1701640 | 0.3757770 |
| | 7 | 0.0022924 | 0.0478240 | 0.0008327 | 0.0288445 |
| | 8 | 0.0000339 | 0.0058217 | 0.0000056 | 0.0024138 |
| | 9 | 0.0000003 | 0.0005799 | 0.0000000 | 0.0001794 |
| 5.260 | 0 | 0.4544960 | -0.4979250 | 0.0925965 | -0.2898660 |
| | 1 | 0.1445200 | -0.3516160 | 0.4544960 | -0.4979250 |
| | 2 | 0.5406390 | -0.4983460 | 0.1997670 | -0.3998250 |
| | 3 | 0.5493490 | -0.4975590 | 0.6463280 | -0.4781090 |
| | 4 | 0.7042470 | -0.4563810 | 0.8343560 | -0.3717610 |
| | 5 | 0.9996070 | -0.0198217 | 0.7436360 | -0.4366250 |
| | 6 | 0.1965560 | 0.3973930 | 0.4021380 | 0.4903290 |
| | 7 | 0.0040675 | 0.0636471 | 0.0017556 | 0.0418634 |
| | 8 | 0.0000639 | 0.0079969 | 0.0000126 | 0.0035454 |
| | 9 | 0.0000007 | 0.0008324 | 0.0000001 | 0.0002738 |
| 5.380 | 0 | 0.3839700 | -0.4863510 | 0.0741218 | -0.2619690 |
| | 1 | 0.1284280 | -0.3345650 | 0.3839700 | -0.4863510 |
| | 2 | 0.4268720 | -0.4946230 | 0.1896540 | -0.3920270 |
| | 3 | 0.5248730 | -0.4993810 | 0.4790360 | -0.4995600 |
| | 4 | 0.6269940 | -0.4836040 | 0.8288050 | -0.3766790 |
| | 5 | 0.9732740 | -0.1612810 | 0.7148590 | -0.4514820 |
| | 6 | 0.3235540 | 0.4678320 | 0.7839440 | 0.4115530 |
| | 7 | 0.0071776 | 0.0844159 | 0.0037295 | 0.0609560 |
| | 8 | 0.0001189 | 0.0109024 | 0.0000267 | 0.0051713 |
| | 9 | 0.0000014 | 0.0011829 | 0.0000002 | 0.0004134 |
| | 10 | 0.0000000 | 0.0001044 | 0. | 0. |
| 5.500 | 0 | 0.2880000 | -0.4528310 | 0.0652667 | -0.2469960 |
| | 1 | 0.1207120 | -0.3257930 | 0.2880000 | -0.4528310 |
| | 2 | 0.2982880 | -0.4575060 | 0.1862110 | -0.3892770 |
| | 3 | 0.4997730 | -0.5000000 | 0.3097570 | -0.4623930 |
| | 4 | 0.5559220 | -0.4968630 | 0.8162270 | -0.3872990 |
| | 5 | 0.9173000 | -0.2754280 | 0.6989350 | -0.4587210 |
| | 6 | 0.5039750 | 0.4999840 | 0.9984620 | 0.0391921 |
| | 7 | 0.0126298 | 0.1116700 | 0.0080506 | 0.0893631 |
| | 8 | 0.0002180 | 0.0147633 | 0.0000562 | 0.0074996 |
| | 9 | 0.0000028 | 0.0016655 | 0.0000004 | 0.0006183 |
| | 10 | 0.0000000 | 0.0001538 | 0. | 0. |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 5.620 | 0 | 0.1780250 | -0.3825340 | 0.0618847 | -0.2409460 |
| | 1 | 0.1176150 | -0.3221510 | 0.1780250 | -0.3825340 |
| | 2 | 0.1780780 | -0.3825780 | 0.1857860 | -0.3889340 |
| | 3 | 0.4709200 | -0.4991540 | 0.1781290 | -0.3826220 |
| | 4 | 0.4930770 | -0.4999520 | 0.7921760 | -0.4057500 |
| | 5 | 0.8446190 | -0.3622670 | 0.6914160 | -0.4619090 |
| | 6 | 0.7156720 | 0.4510940 | 0.9183720 | -0.2737970 |
| | 7 | 0.0222230 | 0.1474080 | 0.0178571 | 0.1324320 |
| | 8 | 0.0003951 | 0.0198726 | 0.0001172 | 0.0108278 |
| | 9 | 0.0000054 | 0.0023246 | 0.0000008 | 0.0009169 |
| 5.740 | 10 | 0.0000000 | 0.0002241 | 0. | 0. |
| | 0 | 0.0799891 | -0.2712760 | 0.0612184 | -0.2397300 |
| | 1 | 0.1161630 | -0.3204200 | 0.0799891 | -0.2712760 |
| | 2 | 0.0832327 | -0.2336330 | 0.1851350 | -0.3884070 |
| | 3 | 0.4348960 | -0.4957430 | 0.0959752 | -0.2945570 |
| | 4 | 0.4389260 | -0.4962560 | 0.7499240 | -0.4330570 |
| | 5 | 0.7637190 | -0.4247970 | 0.6888940 | -0.4629460 |
| | 6 | 0.8975340 | 0.3032600 | 0.7808910 | -0.4136430 |
| | 7 | 0.0392086 | 0.1940910 | 0.0412941 | 0.1989700 |
| | 8 | 0.0007088 | 0.0266137 | 0.0002430 | 0.0155872 |
| 5.860 | 9 | 0.0000103 | 0.0032180 | 0.0000018 | 0.0013486 |
| | 10 | 0.0000001 | 0.0003235 | 0.0000000 | 0.0001037 |
| 5.980 | 0 | 0.0193405 | -0.1377190 | 0.0610628 | -0.2394450 |
| | 1 | 0.1136520 | -0.3173880 | 0.0193405 | -0.1377190 |
| | 2 | 0.0350240 | -0.1838410 | 0.1810330 | -0.3850450 |
| | 3 | 0.3881760 | -0.4873350 | 0.0517507 | -0.2215230 |
| | 4 | 0.3927830 | -0.4883690 | 0.6797620 | -0.4665680 |
| | 5 | 0.6799700 | -0.4664880 | 0.6886010 | -0.4630650 |
| | 6 | 0.9906110 | 0.0964385 | 0.6801720 | -0.4664100 |
| | 7 | 0.0694984 | 0.2543000 | 0.1010890 | 0.3014460 |
| | 8 | 0.0012613 | 0.0354928 | 0.0005027 | 0.0224144 |
| | 9 | 0.0000195 | 0.0044209 | 0.0000039 | 0.0019691 |
| | 10 | 0.0000002 | 0.0004627 | 0.0000000 | 0.0001567 |

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REFRACTIVE INDEX M = 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 6.100 | 0 | 0.0070973 | 0.0839461 | 0.0539356 | -0.2258910 |
| | 1 | 0.0948363 | -0.2929890 | 0.0070973 | 0.0839461 |
| | 2 | 0.0014840 | -0.0384945 | 0.1491350 | -0.3562210 |
| | 3 | 0.2532420 | -0.4348680 | 0.0195717 | -0.1385230 |
| | 4 | 0.3184830 | -0.4658880 | 0.4202380 | -0.4935970 |
| | 5 | 0.5174180 | -0.4996970 | 0.6847440 | -0.4646180 |
| | 6 | 0.9274320 | -0.2594260 | 0.5794610 | -0.4936460 |
| | 7 | 0.2195360 | 0.4139320 | 0.6309130 | 0.4825580 |
| | 8 | 0.0039340 | 0.0625982 | 0.0021810 | 0.0466500 |
| | 9 | 0.0000668 | 0.0081740 | 0.0000170 | 0.0041203 |
| | 10 | 0.0000008 | 0.0009216 | 0.0000001 | 0.0003487 |
| 6.220 | 0 | 0.0227674 | 0.1491610 | 0.0432374 | -0.2033910 |
| | 1 | 0.0741599 | -0.2620310 | 0.0227674 | 0.1491610 |
| | 2 | 0.0000094 | 0.0030742 | 0.1159120 | -0.3201200 |
| | 3 | 0.1691020 | -0.3748420 | 0.0149996 | -0.1215510 |
| | 4 | 0.2865020 | -0.4521270 | 0.2505830 | -0.4333490 |
| | 5 | 0.4432780 | -0.4967720 | 0.6757590 | -0.4680900 |
| | 6 | 0.8402690 | -0.3663560 | 0.5583870 | -0.4965790 |
| | 7 | 0.3801960 | 0.4254350 | 0.9861670 | 0.1167990 |
| | 8 | 0.0069327 | 0.0829738 | 0.0046408 | 0.0679651 |
| | 9 | 0.0001213 | 0.0110152 | 0.0000350 | 0.0059161 |
| | 10 | 0.0000016 | 0.0012850 | 0.0000003 | 0.0005140 |
| | 11 | 0.0000000 | 0.0001252 | 0. | 0. |
| 6.340 | 0 | 0.0370399 | 0.1888600 | 0.0270862 | -0.1623350 |
| | 1 | 0.0459980 | -0.2094810 | 0.0370399 | 0.1888600 |
| | 2 | 0.0008401 | 0.0289722 | 0.0719517 | -0.2584080 |
| | 3 | 0.0879524 | -0.2832260 | 0.0132669 | -0.1144150 |
| | 4 | 0.2552130 | -0.4359810 | 0.1090960 | -0.3117600 |
| | 5 | 0.3759460 | -0.4843660 | 0.6573650 | -0.4745900 |
| | 6 | 0.7474840 | -0.4344560 | 0.5477280 | -0.4977170 |
| | 7 | 0.6126650 | 0.4871410 | 0.8997950 | -0.3002730 |
| | 8 | 0.0122537 | 0.1100160 | 0.0101580 | 0.1002740 |
| | 9 | 0.0002182 | 0.0147689 | 0.0000717 | 0.0084652 |
| | 10 | 0.0000032 | 0.0017781 | 0.0000006 | 0.0007520 |
| | 11 | 0.0000000 | 0.0001801 | 0. | 0. |
| 6.460 | 0 | 0.0464440 | 0.2104450 | 0.0091518 | -0.0952265 |
| | 1 | 0.0164699 | -0.1272740 | 0.0464440 | 0.2104450 |
| | 2 | 0.0019429 | 0.0440360 | 0.0268101 | -0.1615280 |
| | 3 | 0.0276454 | -0.1639550 | 0.0128747 | -0.1127340 |
| | 4 | 0.2225720 | -0.4159730 | 0.0285415 | -0.1665140 |
| | 5 | 0.3161290 | -0.4649640 | 0.6243980 | -0.4842780 |
| | 6 | 0.6573280 | -0.4746030 | 0.5434060 | -0.4981120 |
| | 7 | 0.8562380 | 0.3508480 | 0.7051900 | -0.4559570 |
| | 8 | 0.0218101 | 0.1460630 | 0.0232435 | 0.1506760 |
| | 9 | 0.0003889 | 0.0197170 | 0.0001461 | 0.0120876 |
| | 10 | 0.0000060 | 0.0024430 | 0.0000012 | 0.0010927 |
| | 11 | 0.0000001 | 0.0002568 | 0. | 0. |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 6.580 | 0 | 0.0510974 | 0.2201960 | 0.0000130 | 0.0036011 |
| | 1 | 0.0001343 | -0.0115887 | 0.0510974 | 0.2201960 |
| | 2 | 0.0027873 | 0.0527211 | 0.0007736 | -0.0278033 |
| | 3 | 0.0011518 | -0.0339180 | 0.0128335 | -0.1125560 |
| | 4 | 0.1867840 | -0.3897380 | 0.0015670 | -0.0395545 |
| | 5 | 0.2638690 | -0.4407290 | 0.5696950 | -0.4951190 |
| | 6 | 0.5722750 | -0.4947490 | 0.5424260 | -0.4981970 |
| | 7 | 0.9906460 | 0.0962619 | 0.5751310 | -0.4943230 |
| | 8 | 0.0392661 | 0.1942270 | 0.0568655 | 0.2315850 |
| | 9 | 0.0006886 | 0.0262331 | 0.0002978 | 0.0172532 |
| | 10 | 0.0000111 | 0.0033344 | 0.0000025 | 0.0015780 |
| | 11 | 0.0000001 | 0.0003632 | 0.0000000 | 0.0001328 |
| 6.700 | 0 | 0.0525311 | 0.2230960 | 0.0172942 | 0.1303650 |
| | 1 | 0.0165827 | 0.1277020 | 0.0525311 | 0.2230960 |
| | 2 | 0.0035064 | 0.0591111 | 0.0158648 | 0.1249530 |
| | 3 | 0.0073683 | 0.0855217 | 0.0122638 | -0.1100610 |
| | 4 | 0.1467300 | -0.3538370 | 0.0027533 | 0.0523999 |
| | 5 | 0.2186400 | -0.4133240 | 0.4844810 | -0.4997590 |
| | 6 | 0.4926490 | -0.4999460 | 0.5423090 | -0.4982070 |
| | 7 | 0.9747480 | -0.1568910 | 0.4995790 | -0.5000000 |
| | 8 | 0.0718162 | 0.2581830 | 0.1524220 | 0.3594290 |
| | 9 | 0.0012138 | 0.0342180 | 0.0006089 | 0.0246690 |
| | 10 | 0.0000205 | 0.0045231 | 0.0000051 | 0.0022665 |
| | 11 | 0.0000003 | 0.0005097 | 0.0000000 | 0.0001961 |
| 6.820 | 0 | 0.0526441 | 0.2233220 | 0.0755235 | 0.2642340 |
| | 1 | 0.0752182 | 0.2637430 | 0.0526441 | 0.2233220 |
| | 2 | 0.0045309 | 0.0671590 | 0.0749176 | 0.2632580 |
| | 3 | 0.0338093 | 0.1807380 | 0.0103452 | -0.1011840 |
| | 4 | 0.1028130 | -0.3037150 | 0.0126833 | 0.1119040 |
| | 5 | 0.1795110 | -0.3837800 | 0.3627390 | -0.4807910 |
| | 6 | 0.4183040 | -0.4932810 | 0.5467000 | -0.4983410 |
| | 7 | 0.8743080 | -0.3315020 | 0.4564680 | -0.4981010 |
| | 8 | 0.1336950 | 0.3403250 | 0.4347340 | 0.4957220 |
| | 9 | 0.0021346 | 0.0461529 | 0.0012569 | 0.0354304 |
| | 10 | 0.0000372 | 0.0061012 | 0.0000105 | 0.0032402 |
| | 11 | 0.0000005 | 0.0007101 | 0.0000001 | 0.0002875 |
| 6.940 | 0 | 0.0533659 | 0.2247620 | 0.1692740 | 0.3749940 |
| | 1 | 0.1624350 | 0.3688490 | 0.0533659 | 0.2247620 |
| | 2 | 0.0065975 | 0.0809567 | 0.1560400 | 0.3628930 |
| | 3 | 0.0665922 | 0.2493140 | 0.0066347 | -0.0811830 |
| | 4 | 0.0582720 | -0.2342570 | 0.0221718 | 0.1472420 |
| | 5 | 0.1453340 | -0.3524370 | 0.2142070 | -0.4102710 |
| | 6 | 0.3492530 | -0.4767340 | 0.5350460 | -0.4987700 |
| | 7 | 0.7552460 | -0.4299420 | 0.4324110 | -0.4954110 |
| | 8 | 0.2515080 | 0.4338800 | 0.9281240 | 0.2582830 |
| | 9 | 0.0037571 | 0.0611797 | 0.0026387 | 0.0513006 |
| | 10 | 0.0000671 | 0.0081886 | 0.0000213 | 0.0046148 |
| | 11 | 0.0000010 | 0.0009823 | 0.0000002 | 0.0004187 |

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REFRACTIVE INDEX M= 1.500

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|---------|
| 7.060 | 0 | 0.0567518 | 0.2313680 | 0.2733020 | 0.4456550 | |
| | 1 | 0.2522140 | 0.4342840 | 0.0567518 | 0.2313680 | |
| | 2 | 0.0111325 | 0.1049220 | 0.2331030 | 0.4228070 | |
| | 3 | 0.0967072 | 0.2955590 | 0.0019634 | -0.0442672 | |
| | 4 | 0.0205097 | -0.1417360 | 0.0284086 | 0.1661370 | |
| | 5 | 0.1149280 | -0.3189350 | 0.078196 | -0.2694570 | |
| | 6 | 0.2857890 | -0.4517890 | 0.5222660 | -0.4995040 | |
| | 7 | 0.6453600 | -0.4784040 | 0.4198410 | -0.4935330 | |
| | 8 | 0.4620220 | 0.4985560 | 0.9028790 | -0.2961220 | |
| | 9 | 0.0066415 | 0.0812246 | 0.0058960 | 0.0752565 | |
| | 10 | 0.0001197 | 0.0109419 | 0.0000430 | 0.0065548 | |
| | 11 | 0.0000018 | 0.0013497 | 0.0000004 | 0.0006059 | |
| | 12 | 0.0000000 | 0.0001425 | 0. | 0. | |
| 7.180 | 0 | 0.0654429 | 0.2473060 | 0.3632750 | 0.4809430 | |
| | 1 | 0.3258980 | 0.4687090 | 0.0654429 | 0.2473060 | |
| | 2 | 0.0210901 | 0.1436850 | 0.2922740 | 0.4548080 | |
| | 3 | 0.1204580 | 0.3254960 | 0.0002630 | 0.0162158 | |
| | 4 | 0.0007582 | -0.0275256 | 0.0314456 | 0.1745190 | |
| | 5 | 0.0872610 | -0.2822170 | 0.0070074 | -0.0834167 | |
| | 6 | 0.2283680 | -0.4197810 | 0.4983520 | -0.4999970 | |
| | 7 | 0.5502260 | -0.4974710 | 0.4142110 | -0.4925850 | |
| | 8 | 0.7574730 | 0.4286110 | 0.6399410 | -0.4800170 | |
| | 9 | 0.0118451 | 0.1081880 | 0.0128470 | 0.1126140 | |
| | 10 | 0.0002122 | 0.0145671 | 0.0000864 | 0.0092967 | |
| | 11 | 0.0000034 | 0.0018431 | 0.0000008 | 0.0008718 | |
| | 12 | 0.0000000 | 0.0002011 | 0. | 0. | |
| 7.300 | 0 | 0.0835370 | 0.2766920 | 0.4288990 | 0.4949190 | |
| | 1 | 0.3777690 | 0.4848290 | 0.0835370 | 0.2766920 | |
| | 2 | 0.0422385 | 0.2011330 | 0.3314040 | 0.4707180 | |
| | 3 | 0.1375860 | 0.3444640 | 0.0112731 | 0.1055750 | |
| | 4 | 0.0097814 | 0.0984161 | 0.0323470 | 0.1769200 | |
| | 5 | 0.0616702 | -0.2405560 | 0.0082487 | 0.0904471 | |
| | 6 | 0.1774250 | -0.3820280 | 0.4579620 | -0.4982300 | |
| | 7 | 0.4679940 | -0.4989750 | 0.4124840 | -0.4922810 | |
| | 8 | 0.9769660 | 0.1500100 | 0.4805990 | -0.4996230 | |
| | 9 | 0.0214341 | 0.1448260 | 0.0310295 | 0.1733970 | |
| | 10 | 0.0003741 | 0.0193374 | 0.0001739 | 0.0131868 | |
| | 11 | 0.0000063 | 0.0025020 | 0.0000015 | 0.0012478 | |
| | 12 | 0.0000001 | 0.0002818 | 0.0000000 | 0.0001100 | |

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REFRACTIVE INDEX M = 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 7.420 | 0 | 0.1177780 | 0.3223450 | 0.4709380 | 0.4991550 |
| | 1 | 0.4099600 | 0.4918260 | 0.1177780 | 0.3223450 |
| | 2 | 0.0841687 | 0.2776410 | 0.3538220 | 0.4781550 |
| | 3 | 0.1495480 | 0.3566280 | 0.0516506 | 0.2213210 |
| | 4 | 0.0505589 | 0.2190950 | 0.0324136 | 0.1770960 |
| | 5 | 0.0381667 | -0.1915980 | 0.0495388 | 0.2169900 |
| | 6 | 0.1332140 | -0.3398060 | 0.3944410 | -0.4887300 |
| | 7 | 0.3955060 | -0.4889590 | 0.4123310 | -0.4922540 |
| | 8 | 0.9677450 | -0.1766760 | 0.3965010 | -0.4891710 |
| | 9 | 0.0396287 | 0.1950850 | 0.0832976 | 0.2763310 |
| | 10 | 0.0006568 | 0.0256199 | 0.0003514 | 0.0187434 |
| | 11 | 0.0000114 | 0.0033783 | 0.0000032 | 0.0017777 |
| | 12 | 0.0000001 | 0.0003923 | 0.0000000 | 0.0001606 |
| 7.540 | 0 | 0.1781270 | 0.3826190 | 0.4945020 | 0.4999700 |
| | 1 | 0.4272730 | 0.4946830 | 0.1781270 | 0.3826190 |
| | 2 | 0.1584270 | 0.3651410 | 0.3642990 | 0.4812330 |
| | 3 | 0.1585350 | 0.3652420 | 0.1373980 | 0.3442670 |
| | 4 | 0.1147190 | 0.3186830 | 0.0329592 | 0.1785300 |
| | 5 | 0.0178898 | -0.1325510 | 0.0974397 | 0.2965560 |
| | 6 | 0.0957300 | -0.2942210 | 0.3018260 | -0.4590500 |
| | 7 | 0.3301620 | -0.4702710 | 0.4116820 | -0.4921380 |
| | 8 | 0.8240770 | -0.3807550 | 0.3510490 | -0.4772980 |
| | 9 | 0.0754581 | 0.2641290 | 0.2576460 | 0.4373380 |
| | 10 | 0.0011515 | 0.0339147 | 0.0007169 | 0.0267646 |
| | 11 | 0.0000206 | 0.0045387 | 0.0000064 | 0.0025227 |
| | 12 | 0.0000003 | 0.0005425 | 0.0000001 | 0.0002329 |
| 7.660 | 0 | 0.2747140 | 0.4463700 | 0.5053000 | 0.4999720 |
| | 1 | 0.4347590 | 0.4957250 | 0.2747140 | 0.4463700 |
| | 2 | 0.2701390 | 0.4440310 | 0.3675200 | 0.4821300 |
| | 3 | 0.1670690 | 0.3730380 | 0.2653300 | 0.4415090 |
| | 4 | 0.1875130 | 0.3903230 | 0.0354080 | 0.1848090 |
| | 5 | 0.0036960 | -0.0606825 | 0.1361280 | 0.3429240 |
| | 6 | 0.0647338 | -0.2460560 | 0.1827390 | -0.3864520 |
| | 7 | 0.2703170 | -0.4441240 | 0.4084030 | -0.4915380 |
| | 8 | 0.6707070 | -0.4699560 | 0.3261900 | -0.4688180 |
| | 9 | 0.1488840 | 0.3559740 | 0.7703780 | 0.4205900 |
| | 10 | 0.0020216 | 0.0449166 | 0.0014866 | 0.0385284 |
| | 11 | 0.0000369 | 0.0060706 | 0.0000127 | 0.0035689 |
| | 12 | 0.0000006 | 0.0007456 | 0.0000001 | 0.0003359 |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE P(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 7.780 | 0 | 0.4077340 | 0.4914130 | 0.5085090 | 0.4999280 |
| | 1 | 0.4370680 | 0.4960240 | 0.4077340 | 0.4914130 |
| | 2 | 0.4069630 | 0.4912680 | 0.3677880 | 0.4822030 |
| | 3 | 0.1779670 | 0.3824850 | 0.4062080 | 0.4911240 |
| | 4 | 0.2560570 | 0.4364540 | 0.0416845 | 0.1998670 |
| | 5 | 0.0006528 | 0.0255422 | 0.1621480 | 0.3685870 |
| | 6 | 0.0398684 | -0.1956500 | 0.0643797 | -0.2454280 |
| | 7 | 0.2152330 | -0.4109840 | 0.4000270 | -0.4899040 |
| | 8 | 0.5460540 | -0.4978750 | 0.3130480 | -0.4637340 |
| | 9 | 0.3019630 | 0.4591090 | 0.9332330 | -0.2496180 |
| | 10 | 0.0035663 | 0.0596122 | 0.0031665 | 0.0561828 |
| | 11 | 0.0000654 | 0.0080880 | 0.0000254 | 0.0050381 |
| | 12 | 0.0000010 | 0.0010185 | 0.0000002 | 0.0004817 |
| | 13 | 0.0000000 | 0.0001113 | 0. | 0. |
| 7.900 | 0 | 0.5570320 | 0.4967370 | 0.5087560 | 0.4999230 |
| | 1 | 0.4385170 | 0.4962050 | 0.5570320 | 0.4967370 |
| | 2 | 0.5417100 | 0.4982570 | 0.3691910 | 0.4825260 |
| | 3 | 0.1945530 | 0.3958560 | 0.5276400 | 0.4992350 |
| | 4 | 0.3134180 | 0.4638830 | 0.0550032 | 0.2279860 |
| | 5 | 0.0157645 | 0.1245630 | 0.1771410 | 0.3817880 |
| | 6 | 0.0208365 | -0.1428370 | 0.0016861 | -0.0410272 |
| | 7 | 0.1649070 | -0.3710970 | 0.3834760 | -0.4862330 |
| | 8 | 0.4493490 | -0.4974280 | 0.3068230 | -0.4611750 |
| | 9 | 0.5907570 | 0.4916940 | 0.5882490 | -0.4921500 |
| | 10 | 0.0063508 | 0.0794387 | 0.0070333 | 0.0835692 |
| | 11 | 0.0001154 | 0.0107411 | 0.0000505 | 0.0071051 |
| | 12 | 0.0000019 | 0.0013837 | 0.0000005 | 0.0006874 |
| | 13 | 0.0000000 | 0.0001558 | 0. | 0. |
| 8.020 | 0 | 0.6907630 | 0.4621790 | 0.5104210 | 0.4998910 |
| | 1 | 0.4433690 | 0.4967830 | 0.6907630 | 0.4621790 |
| | 2 | 0.6513240 | 0.4765510 | 0.3759380 | 0.4843640 |
| | 3 | 0.2210400 | 0.4149470 | 0.6157160 | 0.4864260 |
| | 4 | 0.3579520 | 0.4793980 | 0.0811769 | 0.2731070 |
| | 5 | 0.0558969 | 0.2297230 | 0.1841470 | 0.3876040 |
| | 6 | 0.0076196 | -0.0869572 | 0.0289867 | 0.1677690 |
| | 7 | 0.1198540 | -0.3247900 | 0.3547780 | -0.4784460 |
| | 8 | 0.3726400 | -0.4835080 | 0.3045760 | -0.4602280 |
| | 9 | 0.9256670 | 0.2623130 | 0.3982240 | -0.4895320 |
| | 10 | 0.0114843 | 0.1065480 | 0.0166871 | 0.1280960 |
| | 11 | 0.0002023 | 0.0142288 | 0.0001005 | 0.0100246 |
| | 12 | 0.0000035 | 0.0018700 | 0.0000009 | 0.0009765 |
| | 13 | 0.0000000 | 0.0002167 | 0. | 0. |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 8.140 | 0 | 0.7889990 | 0.4080190 | 0.5180010 | 0.4996760 |
| | 1 | 0.4562010 | 0.4980780 | 0.7889990 | 0.4080190 |
| | 2 | 0.7287530 | 0.4446040 | 0.3927750 | 0.4883670 |
| | 3 | 0.2629320 | 0.4402260 | 0.6726360 | 0.4692510 |
| | 4 | 0.3910840 | 0.4879930 | 0.1301040 | 0.3364170 |
| | 5 | 0.1236800 | 0.3292160 | 0.1862890 | 0.3893400 |
| | 6 | 0.0007280 | -0.0269713 | 0.1165280 | 0.3208570 |
| | 7 | 0.0808649 | -0.2726280 | 0.3090000 | -0.4620810 |
| | 8 | 0.3091080 | -0.4621260 | 0.3042190 | -0.4600760 |
| | 9 | 0.9750600 | -0.1559440 | 0.3092190 | -0.4621710 |
| | 10 | 0.0212572 | 0.1442410 | 0.0440278 | 0.2051570 |
| | 11 | 0.0003543 | 0.0188183 | 0.0002010 | 0.0141758 |
| | 12 | 0.0000063 | 0.0025149 | 0.0000019 | 0.0013818 |
| | 13 | 0.0000001 | 0.0002996 | 0.0000000 | 0.0001294 |
| 8.260 | 0 | 0.8515650 | 0.3555300 | 0.5364390 | 0.4986700 |
| | 1 | 0.4822290 | 0.4996840 | 0.8515650 | 0.3555300 |
| | 2 | 0.7784560 | 0.4152860 | 0.4253940 | 0.4944030 |
| | 3 | 0.3268920 | 0.4690780 | 0.7061410 | 0.4555280 |
| | 4 | 0.4155610 | 0.4928180 | 0.2151990 | 0.4109600 |
| | 5 | 0.2138560 | 0.4100260 | 0.1864650 | 0.3894810 |
| | 6 | 0.0014694 | 0.0383041 | 0.2125830 | 0.4091350 |
| | 7 | 0.0487909 | -0.2154310 | 0.2412270 | -0.4278280 |
| | 8 | 0.2541060 | -0.4353570 | 0.3040030 | -0.4599840 |
| | 9 | 0.7845700 | -0.4111200 | 0.2642500 | -0.4409330 |
| | 10 | 0.0407101 | 0.1976180 | 0.1379340 | 0.3448310 |
| | 11 | 0.0006191 | 0.0248737 | 0.0004058 | 0.0201396 |
| | 12 | 0.0000113 | 0.0033674 | 0.0000038 | 0.0019488 |
| | 13 | 0.0000002 | 0.0004118 | 0.0000000 | 0.0001861 |
| 8.380 | 0 | 0.8878600 | 0.3155390 | 0.5712400 | 0.4948990 |
| | 1 | 0.5273360 | 0.4992520 | 0.8878600 | 0.3155390 |
| | 2 | 0.8081180 | 0.3937810 | 0.4804020 | 0.4996160 |
| | 3 | 0.4187650 | 0.4933570 | 0.7236950 | 0.4471700 |
| | 4 | 0.4345540 | 0.4956980 | 0.3453930 | 0.4754960 |
| | 5 | 0.3141610 | 0.4641810 | 0.1874230 | 0.3902510 |
| | 6 | 0.0121935 | 0.1097490 | 0.2895060 | 0.4535330 |
| | 7 | 0.0243696 | -0.1541940 | 0.1510700 | -0.3581170 |
| | 8 | 0.2047870 | -0.4035460 | 0.3022130 | -0.4592170 |
| | 9 | 0.5920620 | -0.4914520 | 0.2403910 | -0.4273210 |
| | 10 | 0.0817865 | 0.2740390 | 0.5206710 | 0.4995730 |
| | 11 | 0.0010836 | 0.0329000 | 0.0008324 | 0.0288391 |
| | 12 | 0.0000202 | 0.0044907 | 0.0000075 | 0.0027413 |
| | 13 | 0.0000003 | 0.0005628 | 0.0000001 | 0.0002661 |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 8.500 | 0 | 0.9073620 | 0.2899250 | 0.6278130 | 0.4833880 |
| | 1 | 0.5969680 | 0.4905070 | 0.9073620 | 0.2899250 |
| | 2 | 0.8245000 | 0.3803940 | 0.5636040 | 0.4959380 |
| | 3 | 0.5381710 | 0.4985410 | 0.7311390 | 0.4433680 |
| | 4 | 0.4513470 | 0.4976270 | 0.5087650 | 0.4999230 |
| | 5 | 0.4110200 | 0.4920190 | 0.1920300 | 0.3938960 |
| | 6 | 0.0363686 | 0.1872060 | 0.3423020 | 0.4744800 |
| | 7 | 0.0081548 | -0.0899349 | 0.0549307 | -0.2278450 |
| | 8 | 0.1596650 | -0.3662950 | 0.2969320 | -0.4569060 |
| | 9 | 0.4544050 | -0.4979170 | 0.2277950 | -0.4194090 |
| | 10 | 0.1746510 | 0.3796680 | 0.9827080 | -0.1303560 |
| | 11 | 0.0019059 | 0.0436153 | 0.0017514 | 0.0418135 |
| | 12 | 0.0000356 | 0.0059681 | 0.0000148 | 0.0038498 |
| | 13 | 0.0000006 | 0.0007651 | 0.0000001 | 0.0003788 |
| 8.620 | 0 | 0.9167320 | 0.2762870 | 0.7087640 | 0.4543320 |
| | 1 | 0.6922860 | 0.4615480 | 0.9167320 | 0.2762870 |
| | 2 | 0.8326840 | 0.3732580 | 0.6745430 | 0.4685450 |
| | 3 | 0.6718220 | 0.4695500 | 0.7330150 | 0.4423850 |
| | 4 | 0.4693230 | 0.4990580 | 0.6689580 | 0.4705880 |
| | 5 | 0.4950980 | 0.4999760 | 0.2036960 | 0.4027450 |
| | 6 | 0.0781868 | 0.2684650 | 0.3748680 | 0.4840890 |
| | 7 | 0.0005547 | -0.0235463 | 0.0006607 | -0.0256949 |
| | 8 | 0.1183070 | -0.3229710 | 0.2858390 | -0.4518130 |
| | 9 | 0.3589080 | -0.4796800 | 0.2216360 | -0.4153470 |
| | 10 | 0.3913230 | 0.4880460 | 0.5525780 | -0.4972280 |
| | 11 | 0.0033835 | 0.0580694 | 0.0038334 | 0.0617961 |
| | 12 | 0.0000625 | 0.0079086 | 0.0000292 | 0.0054031 |
| | 13 | 0.0000011 | 0.0010349 | 0.0000003 | 0.0005369 |
| | 14 | 0.0000000 | 0.0001197 | 0. | 0. |
| 8.740 | 0 | 0.9202590 | 0.2708910 | 0.8079900 | 0.3938810 |
| | 1 | 0.8031870 | 0.3975900 | 0.9202590 | 0.2708910 |
| | 2 | 0.8365360 | 0.3697890 | 0.7981530 | 0.4013790 |
| | 3 | 0.7952160 | 0.435430 | 0.7331660 | 0.4423050 |
| | 4 | 0.4920760 | 0.4999370 | 0.7924180 | 0.4055760 |
| | 5 | 0.5628670 | 0.4960320 | 0.2270300 | 0.4189120 |
| | 6 | 0.1412870 | 0.3483180 | 0.3927110 | 0.4883530 |
| | 7 | 0.0019661 | 0.0442968 | 0.0433654 | 0.2036780 |
| | 8 | 0.0811155 | -0.2730120 | 0.2660100 | -0.4418700 |
| | 9 | 0.2894360 | -0.4535010 | 0.2191860 | -0.4136950 |
| | 10 | 0.7924760 | 0.4055340 | 0.3279300 | -0.4694590 |
| | 11 | 0.0060976 | 0.0778489 | 0.0089263 | 0.0940565 |
| | 12 | 0.0001094 | 0.0104571 | 0.0000576 | 0.0075886 |
| | 13 | 0.0000019 | 0.0013933 | 0.0000006 | 0.0007581 |
| | 14 | 0.0000000 | 0.0001656 | 0. | 0. |

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REFRACTIVE INDEX M= 1.500

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|------------|------------|-----------|------------|---------|
| 8.860 | 0 | 0.9209090 | 0.2698800 | 0.9052390 | 0.2928850 | |
| | 1 | 0.9051450 | 0.2930140 | 0.9209090 | 0.2698800 | |
| | 2 | 0.8393000 | 0.3672540 | 0.9050520 | 0.2931440 | |
| | 3 | 0.8876880 | 0.3157510 | 0.7352330 | 0.4412090 | |
| | 4 | 0.5235210 | 0.4994460 | 0.8714940 | 0.3346530 | |
| | 5 | 0.6150360 | 0.4865870 | 0.2686650 | 0.4432660 | |
| | 6 | 0.2265040 | 0.4185690 | 0.4007630 | 0.4900530 | |
| | 7 | 0.0129632 | 0.1131160 | 0.1728280 | 0.3780980 | |
| | 8 | 0.0491424 | -0.2161650 | 0.2338500 | -0.4232780 | |
| | 9 | 0.2354470 | -0.4242780 | 0.2186410 | -0.4133240 | |
| | 10 | 0.9939520 | -0.0775359 | 0.2372370 | -0.4253890 | |
| | 11 | 0.0112453 | 0.1054460 | 0.0229861 | 0.1498590 | |
| | 12 | 0.0001907 | 0.0138071 | 0.0001142 | 0.0106836 | |
| | 13 | 0.0000035 | 0.0018675 | 0.0000011 | 0.0010663 | |
| | 14 | 0.0000000 | 0.0002274 | 0.0000000 | 0.0001031 | |
| 8.980 | 0 | 0.9211200 | 0.2695510 | 0.9732910 | 0.1612330 | |
| | 1 | 0.9723580 | 0.1639460 | 0.9211200 | 0.2695510 | |
| | 2 | 0.8440270 | 0.3628290 | 0.9714340 | 0.1665850 | |
| | 3 | 0.9448850 | 0.2282040 | 0.7429770 | 0.4369920 | |
| | 4 | 0.5678020 | 0.4953820 | 0.9166040 | 0.2764810 | |
| | 5 | 0.6543680 | 0.4755740 | 0.3376830 | 0.4729200 | |
| | 6 | 0.3296040 | 0.4700690 | 0.4031200 | 0.4905240 | |
| | 7 | 0.0344848 | 0.1824710 | 0.3204410 | 0.4666460 | |
| | 8 | 0.0238753 | -0.1526610 | 0.1856070 | -0.3887890 | |
| | 9 | 0.1906950 | -0.3928490 | 0.2185720 | -0.4132780 | |
| | 10 | 0.7627020 | -0.4254260 | 0.1949580 | -0.3961680 | |
| | 11 | 0.0214664 | 0.1449330 | 0.0703661 | 0.2557630 | |
| | 12 | 0.0003322 | 0.0182228 | 0.0002284 | 0.0151110 | |
| | 13 | 0.0000062 | 0.0024931 | 0.0000022 | 0.0014960 | |
| | 14 | 0.0000001 | 0.0003109 | 0.0000000 | 0.0001470 | |
| 9.100 | 0 | 0.9232330 | 0.2662210 | 0.9992410 | 0.0275389 | |
| | 1 | 0.9983990 | 0.0399786 | 0.9232330 | 0.2662210 | |
| | 2 | 0.8537600 | 0.3533470 | 0.9973090 | 0.0518015 | |
| | 3 | 0.9751470 | 0.1556780 | 0.7603960 | 0.4268420 | |
| | 4 | 0.6286040 | 0.4831780 | 0.9406650 | 0.2362510 | |
| | 5 | 0.6842160 | 0.4648270 | 0.4434290 | 0.4967890 | |
| | 6 | 0.4410770 | 0.4965160 | 0.4032980 | 0.4905600 | |
| | 7 | 0.0679428 | 0.2516480 | 0.4388780 | 0.4962500 | |
| | 8 | 0.00069898 | -0.0833124 | 0.1199550 | -0.3249090 | |
| | 9 | 0.1515660 | -0.3586190 | 0.2176420 | -0.4126420 | |
| | 10 | 0.5223720 | -0.4994990 | 0.1733670 | -0.3785640 | |
| | 11 | 0.0431279 | 0.2031450 | 0.2883040 | 0.4529730 | |
| | 12 | 0.0005797 | 0.0240692 | 0.0004641 | 0.0215372 | |
| | 13 | 0.0000110 | 0.0033164 | 0.0000044 | 0.0020943 | |
| | 14 | 0.0000002 | 0.0004229 | 0.0000000 | 0.0002089 | |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 9.220 | 0 | 0.9295800 | 0.2558530 | 0.9931770 | -0.0823200 |
| | 1 | 0.9966290 | -0.0579635 | 0.9295800 | 0.2558530 |
| | 2 | 0.8713860 | 0.3347730 | 0.9987820 | -0.0348765 |
| | 3 | 0.9893500 | 0.1026490 | 0.7913870 | 0.4063170 |
| | 4 | 0.7072000 | 0.4550480 | 0.9527780 | 0.2121130 |
| | 5 | 0.7078680 | 0.4547420 | 0.5866170 | 0.4924400 |
| | 6 | 0.5491760 | 0.4975760 | 0.4045780 | 0.4908100 |
| | 7 | 0.1151510 | 0.3192040 | 0.5195650 | 0.4996170 |
| | 8 | 0.0000904 | -0.0095095 | 0.0462276 | -0.2099780 |
| | 9 | 0.1162090 | -0.3204750 | 0.2144000 | -0.4104060 |
| | 10 | 0.3728730 | -0.4235690 | 0.1620820 | -0.3685260 |
| | 11 | 0.0933845 | 0.2909710 | 0.9893210 | 0.1027820 |
| | 12 | 0.0010163 | 0.0318641 | 0.0009659 | 0.0310639 |
| | 13 | 0.0000193 | 0.0043978 | 0.0000086 | 0.0029281 |
| | 14 | 0.0000003 | 0.0005726 | 0.0000001 | 0.0002955 |
| 9.340 | 0 | 0.9421290 | 0.2334990 | 0.9738230 | -0.1596620 |
| | 1 | 0.9840250 | -0.1253780 | 0.9421290 | 0.2334990 |
| | 2 | 0.8968710 | 0.3014990 | 0.9913760 | -0.0924645 |
| | 3 | 0.9954490 | 0.0673076 | 0.8383530 | 0.3681260 |
| | 4 | 0.7982500 | 0.4008600 | 0.9582620 | 0.1999910 |
| | 5 | 0.7283790 | 0.4447950 | 0.7454660 | 0.4355990 |
| | 6 | 0.6443710 | 0.4787030 | 0.4103740 | 0.4919020 |
| | 7 | 0.1779360 | 0.3824590 | 0.5699370 | 0.4950850 |
| | 8 | 0.0044958 | 0.0669000 | 0.0005838 | -0.0241542 |
| | 9 | 0.0838377 | -0.2771440 | 0.2071320 | -0.4052510 |
| | 10 | 0.2808550 | -0.4494170 | 0.1564710 | -0.3633020 |
| | 11 | 0.2235170 | 0.4166020 | 0.5361700 | -0.4986900 |
| | 12 | 0.0017978 | 0.0423618 | 0.0020861 | 0.0456267 |
| | 13 | 0.0000338 | 0.0058167 | 0.0000167 | 0.0040924 |
| | 14 | 0.0000006 | 0.0007717 | 0.0000002 | 0.0004163 |
| 9.460 | 0 | 0.9613670 | 0.1927190 | 0.9544900 | -0.2084190 |
| | 1 | 0.9712160 | -0.1671990 | 0.9613670 | 0.1927190 |
| | 2 | 0.9353520 | 0.2459040 | 0.9836450 | -0.1268370 |
| | 3 | 0.9979220 | 0.0455364 | 0.8987350 | 0.3016790 |
| | 4 | 0.8896360 | 0.3133430 | 0.9601540 | 0.1955980 |
| | 5 | 0.7485980 | 0.4336190 | 0.8789290 | 0.3262100 |
| | 6 | 0.7220040 | 0.4480110 | 0.4246330 | 0.4942870 |
| | 7 | 0.2572990 | 0.4371460 | 0.5991600 | 0.4900690 |
| | 8 | 0.0211239 | 0.1437970 | 0.0463379 | 0.2102160 |
| | 9 | 0.0547055 | -0.2274040 | 0.1937180 | -0.3952100 |
| | 10 | 0.2195990 | -0.4139750 | 0.1541000 | -0.3610450 |
| | 11 | 0.5668010 | 0.4955170 | 0.2687670 | -0.4433180 |
| | 12 | 0.0032256 | 0.0567027 | 0.0047727 | 0.0689196 |
| | 13 | 0.0000589 | 0.0076780 | 0.0000328 | 0.0057250 |
| | 14 | 0.0000011 | 0.0010353 | 0.0000003 | 0.0005843 |
| | 15 | 0.0000000 | 0.0001255 | 0. | 0. |

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REFRACTIVE INDEX M= 1.500

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|---------|
| 9.580 | 0 | 0.9839360 | 0.1257210 | 0.9406860 | -0.2362120 | |
| | 1 | 0.9622860 | -0.1905040 | 0.9839360 | 0.1257210 | |
| | 2 | 0.9738010 | 0.1597280 | 0.9785710 | -0.1448100 | |
| | 3 | 0.9989190 | 0.0328648 | 0.9596680 | 0.1967360 | |
| | 4 | 0.9596670 | 0.1967390 | 0.9604230 | 0.1949640 | |
| | 5 | 0.7712270 | 0.4200420 | 0.9596660 | 0.1967420 | |
| | 6 | 0.7819680 | 0.4129090 | 0.4522900 | 0.4977190 | |
| | 7 | 0.3521950 | 0.4776540 | 0.6144180 | 0.4867320 | |
| | 8 | 0.0504983 | 0.2189710 | 0.2047810 | 0.4035410 | |
| | 9 | 0.0298895 | -0.1702830 | 0.1715780 | -0.3770130 | |
| | 10 | 0.1749690 | -0.3799410 | 0.1534560 | -0.3604270 | |
| | 11 | 0.9928270 | 0.0843915 | 0.1791130 | -0.3834470 | |
| | 12 | 0.0059156 | 0.0766849 | 0.0119862 | 0.1088240 | |
| | 13 | 0.0001025 | 0.0101229 | 0.0000645 | 0.0080294 | |
| | 14 | 0.0000019 | 0.0013837 | 0.0000007 | 0.0008181 | |
| | 15 | 0.0000000 | 0.0001718 | 0. | 0. | |
| 9.700 | 0 | 0.9993130 | 0.0262039 | 0.9330310 | -0.2499680 | |
| | 1 | 0.9575780 | -0.2015490 | 0.9993130 | 0.0262039 | |
| | 2 | 0.9984020 | 0.0399370 | 0.9762620 | -0.1522310 | |
| | 3 | 0.9993720 | 0.0250596 | 0.9969960 | 0.0547291 | |
| | 4 | 0.9951510 | 0.0694665 | 0.9606690 | 0.1943820 | |
| | 5 | 0.7987600 | 0.4009270 | 0.9931390 | 0.0825489 | |
| | 6 | 0.8268350 | 0.3783900 | 0.4995860 | 0.5000000 | |
| | 7 | 0.4583940 | 0.4982660 | 0.6209230 | 0.4851570 | |
| | 8 | 0.0928420 | 0.2902110 | 0.4023900 | 0.4903800 | |
| | 9 | 0.0112131 | -0.1052970 | 0.1379650 | -0.3448640 | |
| | 10 | 0.1396020 | -0.3465740 | 0.1534110 | -0.3603830 | |
| | 11 | 0.7662060 | -0.4232430 | 0.1410540 | -0.3480770 | |
| | 12 | 0.0112124 | 0.1052930 | 0.0354052 | 0.1846020 | |
| | 13 | 0.0001780 | 0.0133420 | 0.0001280 | 0.0113132 | |
| | 14 | 0.0000034 | 0.0018427 | 0.0000013 | 0.0011426 | |
| | 15 | 0.0000001 | 0.0002338 | 0.0000000 | 0.0001152 | |
| 9.820 | 0 | 0.9893140 | -0.1028190 | 0.9300240 | -0.2551070 | |
| | 1 | 0.9558670 | -0.2053910 | 0.9893140 | -0.1028190 | |
| | 2 | 0.9895340 | -0.1017690 | 0.9757170 | -0.1539270 | |
| | 3 | 0.9996720 | 0.0181126 | 0.9897560 | -0.1006940 | |
| | 4 | 0.9978460 | -0.0463616 | 0.9624410 | 0.1901270 | |
| | 5 | 0.8331510 | 0.3728410 | 0.9999980 | -0.0013478 | |
| | 6 | 0.8600700 | 0.3469150 | 0.5734590 | 0.4945740 | |
| | 7 | 0.5683850 | 0.4953010 | 0.6226040 | 0.4847350 | |
| | 8 | 0.1481750 | 0.3552730 | 0.5627210 | 0.4960510 | |
| | 9 | 0.0010723 | -0.0327285 | 0.0914928 | -0.2883090 | |
| | 10 | 0.1095630 | -0.3123440 | 0.1529460 | -0.3599360 | |
| | 11 | 0.4631580 | -0.4986410 | 0.1224640 | -0.3278210 | |
| | 12 | 0.0223368 | 0.1477760 | 0.1425820 | 0.3496460 | |
| | 13 | 0.0003098 | 0.0175987 | 0.0002579 | 0.0160584 | |
| | 14 | 0.0000060 | 0.0024458 | 0.0000025 | 0.0015928 | |
| | 15 | 0.0000001 | 0.0003167 | 0.0000000 | 0.0001626 | |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 9.940 | 0 | 0.9381910 | -0.2408090 | 0.9295090 | -0.2559720 |
| | 1 | 0.9554610 | -0.2062890 | 0.9381910 | -0.2408090 |
| | 2 | 0.9397110 | -0.2380210 | 0.9756510 | -0.1541320 |
| | 3 | 0.9999360 | 0.0080182 | 0.9411600 | -0.2353260 |
| | 4 | 0.9806560 | -0.1577320 | 0.9672230 | 0.1780540 |
| | 5 | 0.8749690 | 0.3307540 | 0.9968370 | -0.0561472 |
| | 6 | 0.8850050 | 0.3190160 | 0.6778570 | 0.4672970 |
| | 7 | 0.6730130 | 0.4691120 | 0.6227300 | 0.4847030 |
| | 8 | 0.2163110 | 0.4117290 | 0.6686260 | 0.4707070 |
| | 9 | 0.0021329 | 0.0461343 | 0.0373837 | -0.1897000 |
| | 10 | 0.0827919 | -0.2755670 | 0.1509930 | -0.3580420 |
| | 11 | 0.3022560 | -0.4592350 | 0.1129040 | -0.3164750 |
| | 12 | 0.0480347 | 0.2138400 | 0.8128740 | 0.3900120 |
| | 13 | 0.0005415 | 0.0232648 | 0.0005318 | 0.0230546 |
| | 14 | 0.0000105 | 0.0032370 | 0.0000049 | 0.0022183 |
| | 15 | 0.0000002 | 0.0004271 | 0.0000001 | 0.0002287 |
| 10.060 | 0 | 0.8501520 | -0.3569220 | 0.9292530 | -0.2564020 |
| | 1 | 0.9545470 | -0.2081870 | 0.8501520 | -0.3569220 |
| | 2 | 0.8634730 | -0.3433470 | 0.9747380 | -0.1569210 |
| | 3 | 0.9999100 | -0.0094925 | 0.8752700 | -0.3304130 |
| | 4 | 0.9569430 | -0.2029860 | 0.9759920 | 0.1530740 |
| | 5 | 0.9218090 | 0.2684730 | 0.9920890 | -0.0885937 |
| | 6 | 0.9044560 | 0.2939650 | 0.8042050 | 0.3968120 |
| | 7 | 0.7643050 | 0.4244320 | 0.6243660 | 0.4842860 |
| | 8 | 0.2966680 | 0.4567890 | 0.7326800 | 0.4425610 |
| | 9 | 0.0168947 | 0.1288770 | 0.0007349 | -0.0270988 |
| | 10 | 0.0584300 | -0.2345550 | 0.1463100 | -0.3534170 |
| | 11 | 0.2155330 | -0.4111910 | 0.1081160 | -0.3105260 |
| | 12 | 0.1163090 | 0.3205950 | 0.5449500 | -0.4979750 |
| | 13 | 0.0009545 | 0.0308802 | 0.0011352 | 0.0336740 |
| | 14 | 0.0000183 | 0.0042742 | 0.0000095 | 0.0030894 |
| | 15 | 0.0000003 | 0.0005738 | 0.0000001 | 0.0003206 |
| 10.180 | 0 | 0.7499590 | -0.4330360 | 0.9269830 | -0.2601640 |
| | 1 | 0.9513770 | -0.2150780 | 0.7499590 | -0.4330360 |
| | 2 | 0.7849020 | -0.4108900 | 0.9714460 | -0.1665500 |
| | 3 | 0.9984650 | -0.0391432 | 0.8146650 | -0.3885690 |
| | 4 | 0.9349350 | -0.2466400 | 0.9880390 | 0.1087110 |
| | 5 | 0.9662760 | 0.1805170 | 0.9887370 | -0.1055300 |
| | 6 | 0.9206620 | 0.2702340 | 0.9215230 | 0.2689200 |
| | 7 | 0.8377820 | 0.3686510 | 0.6307330 | 0.4826060 |
| | 8 | 0.3878630 | 0.4872630 | 0.7696820 | 0.4210370 |
| | 9 | 0.0471962 | 0.2120580 | 0.0407338 | 0.1976730 |
| | 10 | 0.0365559 | -0.1876690 | 0.1373840 | -0.3442530 |
| | 11 | 0.1628970 | -0.3692720 | 0.1060100 | -0.3078510 |
| | 12 | 0.3313470 | 0.4706980 | 0.2194030 | -0.4138420 |
| | 13 | 0.0017049 | 0.0412557 | 0.0025568 | 0.0504997 |
| | 14 | 0.0000317 | 0.0056340 | 0.0000186 | 0.0043074 |
| | 15 | 0.0000006 | 0.0007678 | 0.0000002 | 0.0004481 |

REFRACTIVE INDEX M= 1.500

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 10.300 | 0 | 0.6622020 | -0.4729590 | 0.9200740 | -0.2711790 |
| | 1 | 0.9433530 | -0.2311670 | 0.6622020 | -0.4729590 |
| | 2 | 0.7203700 | -0.4488170 | 0.9634740 | -0.1875950 |
| | 3 | 0.9925600 | -0.0859332 | 0.7695720 | -0.4211070 |
| | 4 | 0.9178510 | -0.2745910 | 0.9985930 | 0.0374880 |
| | 5 | 0.9955450 | 0.0665969 | 0.9871670 | -0.1125550 |
| | 6 | 0.9354450 | 0.2457400 | 0.9896060 | 0.1014180 |
| | 7 | 0.8929240 | 0.3092090 | 0.6455070 | 0.4783590 |
| | 8 | 0.4871750 | 0.4998350 | 0.7899380 | 0.4073520 |
| | 9 | 0.0937993 | 0.2915490 | 0.2096890 | 0.4070870 |
| | 10 | 0.0181312 | -0.1334260 | 0.1223960 | -0.3277420 |
| | 11 | 0.1269610 | -0.3329300 | 0.1053640 | -0.3070210 |
| | 12 | 0.8853920 | 0.3185490 | 0.1330280 | -0.3396050 |
| | 13 | 0.0031082 | 0.0556642 | 0.0062750 | 0.0789658 |
| | 14 | 0.0000550 | 0.0074180 | 0.0000363 | 0.0060211 |
| | 15 | 0.0000010 | 0.0010235 | 0.0000004 | 0.0006245 |
| | 16 | 0.0000000 | 0.0001292 | 0. | 0. |
| 10.420 | 0 | 0.5977230 | -0.4903570 | 0.9048520 | -0.2934190 |
| | 1 | 0.9266770 | -0.2606670 | 0.5977230 | -0.4903570 |
| | 2 | 0.6748400 | -0.4684350 | 0.9466940 | -0.2246420 |
| | 3 | 0.9757300 | -0.1538870 | 0.7408800 | -0.4381520 |
| | 4 | 0.9058400 | -0.2920510 | 0.9956480 | -0.0658261 |
| | 5 | 0.9959760 | -0.0633082 | 0.9867850 | -0.1141960 |
| | 6 | 0.9500210 | 0.2179020 | 0.9963090 | -0.0606436 |
| | 7 | 0.9320280 | 0.2516970 | 0.6729990 | 0.4691180 |
| | 8 | 0.5901670 | 0.4918030 | 0.7999240 | 0.4000570 |
| | 9 | 0.1561920 | 0.3630370 | 0.4511730 | 0.4976100 |
| | 10 | 0.0050234 | -0.0706974 | 0.0993921 | -0.2991880 |
| | 11 | 0.0997503 | -0.2996670 | 0.1053050 | -0.3069450 |
| | 12 | 0.8051470 | -0.3960870 | 0.1000850 | -0.3001130 |
| | 13 | 0.0058432 | 0.0762173 | 0.0178679 | 0.1324710 |
| | 14 | 0.0000954 | 0.0097649 | 0.0000715 | 0.0084553 |
| | 15 | 0.0000018 | 0.0013600 | 0.0000008 | 0.0008688 |
| | 16 | 0.0000000 | 0.0001751 | 0. | 0. |
| 10.540 | 0 | 0.5562370 | -0.4968270 | 0.8755680 | -0.3300740 |
| | 1 | 0.8949160 | -0.3066610 | 0.5562370 | -0.4968270 |
| | 2 | 0.6465060 | -0.4780540 | 0.9137200 | -0.2807770 |
| | 3 | 0.9371970 | -0.2426080 | 0.7254500 | -0.4462870 |
| | 4 | 0.8975730 | -0.3032090 | 0.9600500 | -0.1958410 |
| | 5 | 0.9625310 | -0.1899090 | 0.9867430 | -0.1143730 |
| | 6 | 0.9650670 | 0.1836090 | 0.9647420 | -0.1844310 |
| | 7 | 0.9585850 | 0.1992480 | 0.7179130 | 0.4500160 |
| | 8 | 0.6908280 | 0.4621520 | 0.8038170 | 0.3971090 |
| | 9 | 0.2326530 | 0.4225230 | 0.6537650 | 0.4757690 |
| | 10 | 0.0000009 | 0.0009476 | 0.0672220 | -0.2504060 |
| | 11 | 0.0773180 | -0.2670950 | 0.1050800 | -0.3066560 |
| | 12 | 0.4150840 | -0.4927370 | 0.0247691 | -0.2785380 |
| | 13 | 0.0115092 | 0.1066620 | 0.0681032 | 0.2519230 |
| | 14 | 0.0001655 | 0.0128646 | 0.0001430 | 0.0119595 |
| | 15 | 0.0000032 | 0.0018016 | 0.0000015 | 0.0012070 |
| | 16 | 0.0000001 | 0.0002365 | 0.0000000 | 0.0001258 |

REFRACTIVE INDEX M= 1.500

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| X | N | RE A(N) | IM A(N) | RE P(N) | IM B(N) |
|---------------|----|------------|------------|-----------|------------|
| 10.660 | | 0.5329330 | -0.4989140 | 0.8235320 | -0.3812180 |
| 0 | 1 | 0.8383460 | -0.3681330 | 0.5329330 | -0.4989140 |
| 2 | 3 | 0.6311510 | -0.4824930 | 0.8533640 | -0.3537430 |
| 4 | 5 | 0.8649020 | -0.3418290 | 0.7191120 | -0.4494330 |
| 6 | 7 | 0.8910970 | -0.3115180 | 0.8771940 | -0.3282150 |
| 8 | 9 | 0.9038900 | -0.2947420 | 0.9861550 | -0.1168450 |
| 10 | 11 | 0.9802330 | 0.1391980 | 0.9235690 | -0.2656860 |
| 12 | 13 | 0.9760600 | 0.1528620 | 0.7837150 | 0.4117110 |
| 14 | 15 | 0.7825400 | 0.4125180 | 0.8046060 | 0.3965030 |
| 16 | 0 | 0.3205120 | 0.4666730 | 0.7812890 | 0.4133720 |
| 1 | 2 | 0.0065686 | 0.0807804 | 0.0288414 | -0.1673610 |
| 3 | 4 | 0.0576675 | -0.2331140 | 0.1039120 | -0.3051540 |
| 5 | 6 | 0.2423020 | -0.4284760 | 0.0770501 | -0.2666710 |
| 7 | 8 | 0.0243756 | 0.1542120 | 0.4774590 | 0.4994920 |
| 9 | 10 | 0.0002885 | 0.0169842 | 0.0002925 | 0.0171011 |
| 11 | 12 | 0.0000057 | 0.0023805 | 0.0000028 | 0.0016753 |
| 13 | 14 | 0.0000001 | 0.0003179 | 0.0000000 | 0.0001761 |
| 10.780 | | 0.5222530 | -0.4995050 | 0.7385220 | -0.4394400 |
| 0 | 1 | 0.7465200 | -0.4350030 | 0.5222530 | -0.4995050 |
| 2 | 3 | 0.6242040 | -0.4843280 | 0.7547550 | -0.4302330 |
| 4 | 5 | 0.7555680 | -0.4297500 | 0.7177580 | -0.4500900 |
| 6 | 7 | 0.8841600 | -0.3200330 | 0.7564010 | -0.4292540 |
| 8 | 9 | 0.8362920 | -0.3700100 | 0.9839760 | -0.1255690 |
| 10 | 11 | 0.9934480 | 0.0806761 | 0.8886860 | -0.3145210 |
| 12 | 13 | 0.9872830 | 0.1120520 | 0.8676470 | 0.3388740 |
| 14 | 15 | 0.8596440 | 0.3473560 | 0.8047690 | 0.3963790 |
| 16 | 0 | 0.4164350 | 0.4929670 | 0.8526660 | 0.3544390 |
| 1 | 2 | 0.0285122 | 0.1664310 | 0.0008763 | -0.0295900 |
| 3 | 4 | 0.0399322 | -0.1958000 | 0.1009380 | -0.3012460 |
| 5 | 6 | 0.1622720 | -0.3687000 | 0.0731814 | -0.2604340 |
| 7 | 8 | 0.0580910 | 0.2339150 | 0.5908160 | -0.4916830 |
| 9 | 10 | 0.0005069 | 0.0225092 | 0.0006182 | 0.0248564 |
| 11 | 12 | 0.0000098 | 0.0031387 | 0.0000054 | 0.0023260 |
| 13 | 14 | 0.0000002 | 0.0004258 | 0.0000001 | 0.0002457 |
| 10.900 | | 0.5190880 | -0.4996360 | 0.6161450 | -0.4863230 |
| 0 | 1 | 0.6177270 | -0.4859430 | 0.5190880 | -0.4996360 |
| 2 | 3 | 0.6213360 | -0.4850540 | 0.6193360 | -0.4855500 |
| 4 | 5 | 0.6244540 | -0.4842640 | 0.7175250 | -0.4502030 |
| 6 | 7 | 0.8741750 | -0.3316530 | 0.6292800 | -0.4829980 |
| 8 | 9 | 0.7734630 | -0.4185910 | 0.9785280 | -0.1449510 |
| 10 | 11 | 0.9999790 | 0.0046334 | 0.8647110 | -0.3420320 |
| 12 | 13 | 0.9942810 | 0.0754097 | 0.9514990 | 0.2148230 |
| 14 | 15 | 0.9188830 | 0.2730150 | 0.8066770 | 0.3949040 |
| 16 | 0 | 0.5166300 | 0.4997230 | 0.8912550 | 0.3113190 |
| 1 | 2 | 0.0690894 | 0.2536060 | 0.0314840 | 0.1746220 |
| 3 | 4 | 0.0240861 | -0.1533160 | 0.0950788 | -0.2933240 |
| 5 | 6 | 0.1181950 | -0.3228390 | 0.0714363 | -0.2575520 |
| 7 | 8 | 0.1687760 | 0.3745540 | 0.1784030 | -0.3820520 |
| 9 | 10 | 0.0009017 | 0.0300152 | 0.0013736 | 0.0370374 |
| 11 | 12 | 0.00000171 | 0.0041319 | 0.0000105 | 0.0032335 |
| 13 | 14 | 0.0000003 | 0.0005684 | 0.0000001 | 0.0003420 |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------|----|-----------|------------|-----------|------------|
| 11.500 | 0 | 0.4562290 | -0.4980800 | 0.1050810 | -0.3066570 |
| | 1 | 0.1263040 | -0.3321920 | 0.4562290 | -0.4980800 |
| | 2 | 0.5152260 | -0.4997680 | 0.1481230 | -0.3552220 |
| | 3 | 0.2521290 | -0.4342350 | 0.5797860 | -0.4935930 |
| | 4 | 0.6225620 | -0.4847460 | 0.3596990 | -0.4799120 |
| | 5 | 0.6221340 | -0.4848540 | 0.6722010 | -0.4694110 |
| | 6 | 0.7039820 | -0.4564990 | 0.8413190 | -0.3653790 |
| | 7 | 0.9846440 | -0.1229630 | 0.7294030 | -0.4442680 |
| | 8 | 0.9965460 | -0.0586678 | 0.9313160 | 0.2529160 |
| | 9 | 0.9312910 | 0.2529580 | 0.9288930 | 0.2570040 |
| | 10 | 0.5240790 | 0.4994200 | 0.9312670 | 0.2530000 |
| | 11 | 0.0352594 | 0.1844350 | 0.0008937 | -0.0298823 |
| | 12 | 0.0267123 | -0.1612410 | 0.0681111 | -0.2519370 |
| | 13 | 0.1198430 | -0.3247780 | 0.0485569 | -0.2149400 |
| | 14 | 0.0287303 | 0.1670470 | 0.6964990 | -0.4597700 |
| | 15 | 0.0002694 | 0.0164119 | 0.0003370 | 0.0183555 |
| | 16 | 0.0000053 | 0.0023036 | 0.0000030 | 0.0017473 |
| | 17 | 0.0000001 | 0.0003155 | 0.0000000 | 0.0001876 |
| 11.620 | 0 | 0.3991700 | -0.4897280 | 0.0819513 | -0.2742910 |
| | 1 | 0.1047670 | -0.3062540 | 0.3991700 | -0.4897280 |
| | 2 | 0.4392200 | -0.4962920 | 0.1290380 | -0.3352420 |
| | 3 | 0.2368250 | -0.4251340 | 0.4837670 | -0.4997360 |
| | 4 | 0.4966860 | -0.4999890 | 0.3548520 | -0.4784680 |
| | 5 | 0.6085440 | -0.4880760 | 0.5109900 | -0.4998790 |
| | 6 | 0.6044630 | -0.4889660 | 0.8363210 | -0.3699840 |
| | 7 | 0.9654220 | -0.1827080 | 0.6723810 | -0.4693450 |
| | 8 | 0.9888850 | -0.1048420 | 0.9785290 | 0.1449480 |
| | 9 | 0.9710150 | 0.1677660 | 0.9291690 | 0.2565420 |
| | 10 | 0.6314590 | 0.4824090 | 0.9642950 | 0.1855540 |
| | 11 | 0.0815109 | 0.2736180 | 0.0223354 | 0.1477720 |
| | 12 | 0.0155892 | -0.1238800 | 0.0643097 | -0.2453040 |
| | 13 | 0.0838967 | -0.2772330 | 0.0471902 | -0.2120450 |
| | 14 | 0.0811787 | 0.2731090 | 0.1443840 | -0.3514780 |
| | 15 | 0.0004775 | 0.0218470 | 0.0007404 | 0.0271999 |
| | 16 | 0.0000092 | 0.0030291 | 0.0000059 | 0.0024228 |
| | 17 | 0.0000002 | 0.0004202 | 0.0000001 | 0.0002602 |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 11.980 | 0 | 0.1113660 | -0.3145840 | 0.0642109 | -0.2451280 |
| | 1 | 0.0887862 | -0.2844350 | 0.1113660 | -0.3145840 |
| | 2 | 0.1113790 | -0.3146010 | 0.1166970 | -0.3210590 |
| | 3 | 0.2205430 | -0.4146130 | 0.1113920 | -0.3146170 |
| | 4 | 0.1409890 | -0.3480100 | 0.3491170 | -0.4766910 |
| | 5 | 0.5382520 | -0.4985350 | 0.1684770 | -0.3742890 |
| | 6 | 0.4050000 | -0.4908920 | 0.7558910 | -0.4295580 |
| | 7 | 0.7975050 | -0.4018590 | 0.6062920 | -0.4885710 |
| | 8 | 0.9481720 | -0.2216790 | 0.8479250 | -0.3590940 |
| | 9 | 0.9943010 | -0.0752732 | 0.9453270 | 0.2273410 |
| | 10 | 0.8878050 | 0.3156070 | 0.9892400 | 0.1031690 |
| | 11 | 0.3621550 | 0.4806230 | 0.7388900 | 0.4392400 |
| | 12 | 0.0010882 | 0.0329704 | 0.0328364 | -0.1782080 |
| | 13 | 0.0358696 | -0.1859650 | 0.0465834 | -0.2107450 |
| | 14 | 0.3542380 | -0.4782820 | 0.0382350 | -0.1917630 |
| | 15 | 0.0030749 | 0.0553661 | 0.0159488 | 0.1252770 |
| | 16 | 0.0000473 | 0.0068739 | 0.0000438 | 0.0066177 |
| | 17 | 0.0000009 | 0.0009750 | 0.0000005 | 0.0006870 |
| | 18 | 0.0000000 | 0.0001310 | 0. | 0. |
| 12.100 | 0 | 0.0359848 | -0.1862520 | 0.0641185 | -0.2449640 |
| | 1 | 0.0883479 | -0.2838000 | 0.0359848 | -0.1862520 |
| | 2 | 0.0386657 | -0.1927970 | 0.1161570 | -0.3204130 |
| | 3 | 0.2129450 | -0.4093890 | 0.0413049 | -0.1989940 |
| | 4 | 0.0817875 | -0.2740410 | 0.3366100 | -0.4725500 |
| | 5 | 0.4908210 | -0.4999160 | 0.1245140 | -0.3301670 |
| | 6 | 0.3699380 | -0.4827880 | 0.6835840 | -0.4650780 |
| | 7 | 0.6933430 | -0.4611060 | 0.6033150 | -0.4892100 |
| | 8 | 0.9273290 | -0.2595960 | 0.7043620 | -0.4563290 |
| | 9 | 0.9794430 | -0.1418950 | 0.9603230 | 0.1952000 |
| | 10 | 0.9417570 | 0.2342020 | 0.9904530 | 0.0972421 |
| | 11 | 0.4874570 | 0.4998430 | 0.9083290 | 0.2885610 |
| | 12 | 0.0111836 | 0.1051590 | 0.0149820 | -0.1214810 |
| | 13 | 0.0261009 | -0.1594350 | 0.0461801 | -0.2098750 |
| | 14 | 0.1507420 | -0.3577970 | 0.0337985 | -0.1807100 |
| | 15 | 0.0063009 | 0.0791280 | 0.0971261 | 0.2961290 |
| | 16 | 0.0000820 | 0.0090554 | 0.0000884 | 0.0094028 |
| | 17 | 0.0000016 | 0.0012846 | 0.0000009 | 0.0009483 |
| | 18 | 0.0000000 | 0.0001750 | 0.0000000 | 0.0001029 |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 12.460 | 0 | 0.0189742 | 0.1364340 | 0.0499169 | -0.2177730 |
| | 1 | 0.0665838 | -0.2493000 | 0.0189742 | 0.1364340 |
| | 2 | 0.0063107 | 0.0791890 | 0.0861645 | -0.2806070 |
| | 3 | 0.1371700 | -0.3440270 | 0.0006640 | 0.0257591 |
| | 4 | 0.0204857 | -0.1416550 | 0.2070470 | -0.4051890 |
| | 5 | 0.2343600 | -0.4235980 | 0.0828336 | -0.2756310 |
| | 6 | 0.3087230 | -0.4619670 | 0.2683030 | -0.4430760 |
| | 7 | 0.3534760 | -0.4780490 | 0.5963920 | -0.4906210 |
| | 8 | 0.8150300 | -0.3882730 | 0.4195290 | -0.4934820 |
| | 9 | 0.9054490 | -0.2925940 | 0.9944830 | -0.0740690 |
| | 10 | 0.9991240 | -0.0295761 | 0.9910300 | 0.0942842 |
| | 11 | 0.8215940 | 0.3828540 | 0.9999920 | 0.0028023 |
| | 12 | 0.1581470 | 0.3648790 | 0.1218530 | 0.3271160 |
| | 13 | 0.0037780 | -0.0613494 | 0.0382776 | -0.1918660 |
| | 14 | 0.0422335 | -0.2011210 | 0.0302044 | -0.1711490 |
| | 15 | 0.1515370 | 0.3585710 | 0.0488464 | -0.2155470 |
| | 16 | 0.0004550 | 0.0213251 | 0.0009338 | 0.0305443 |
| | 17 | 0.0000085 | 0.0029138 | 0.0000063 | 0.0025145 |
| | 18 | 0.0000002 | 0.0004110 | 0.0000001 | 0.0002720 |
| 12.580 | 0 | 0.0361215 | 0.1865930 | 0.0349569 | -0.1836710 |
| | 1 | 0.0464103 | -0.2103720 | 0.0361215 | 0.1865930 |
| | 2 | 0.0143382 | 0.1188810 | 0.0599802 | -0.2374500 |
| | 3 | 0.0894804 | -0.2854360 | 0.0029135 | 0.0538987 |
| | 4 | 0.0157028 | -0.1243230 | 0.1296230 | -0.3350880 |
| | 5 | 0.1332160 | -0.3398080 | 0.0813744 | -0.2734090 |
| | 6 | 0.2915350 | -0.4544690 | 0.1371230 | -0.3439770 |
| | 7 | 0.2718810 | -0.4449290 | 0.5822280 | -0.4931920 |
| | 8 | 0.7493060 | -0.4334130 | 0.3824810 | -0.4859930 |
| | 9 | 0.8754680 | -0.3301870 | 0.9408420 | -0.2359190 |
| | 10 | 0.9873620 | -0.1116180 | 0.9919800 | 0.0891926 |
| | 11 | 0.8966440 | 0.3044230 | 0.9989890 | -0.0317878 |
| | 12 | 0.2629880 | 0.4402560 | 0.3954780 | 0.4889530 |
| | 13 | 0.0002689 | -0.0163974 | 0.0315360 | -0.1747610 |
| | 14 | 0.0316091 | -0.1749570 | 0.0301380 | -0.1709670 |
| | 15 | 0.9231660 | 0.2663270 | 0.0316865 | -0.1751640 |
| | 16 | 0.0008377 | 0.0289309 | 0.0024450 | 0.0493866 |
| | 17 | 0.0000146 | 0.0038249 | 0.0000123 | 0.0035047 |
| | 18 | 0.0000003 | 0.0005432 | 0.0000001 | 0.0003748 |

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REFRACTIVE INDEX M= 1.500

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 12.940 | 0 | 0.0587608 | 0.2351770 | 0.0066840 | 0.0814823 |
| | 1 | 0.0060745 | 0.0777020 | 0.0587608 | 0.2351770 |
| | 2 | 0.0248924 | 0.1557970 | 0.0054798 | 0.0738226 |
| | 3 | 0.0054798 | 0.0738225 | 0.0054101 | 0.0733539 |
| | 4 | 0.0099724 | -0.0993630 | 0.0054798 | 0.0738224 |
| | 5 | 0.0000044 | 0.0020952 | 0.0762965 | -0.2654720 |
| | 6 | 0.2066860 | -0.4049280 | 0.0031732 | -0.0562421 |
| | 7 | 0.1390010 | -0.3459480 | 0.4317110 | -0.4953150 |
| | 8 | 0.4435320 | -0.4968010 | 0.3499550 | -0.4769550 |
| | 9 | 0.7663330 | -0.4231630 | 0.4572650 | -0.4981700 |
| | 10 | 0.8939090 | -0.3079540 | 0.9998410 | 0.0126098 |
| | 11 | 0.9987280 | 0.0356461 | 0.9958930 | -0.0639534 |
| | 12 | 0.6768460 | 0.4676810 | 0.9955590 | 0.0664900 |
| | 13 | 0.0334312 | 0.1797600 | 0.0006006 | -0.0245000 |
| | 14 | 0.0111694 | -0.1050940 | 0.0291457 | -0.1682150 |
| | 15 | 0.0615308 | -0.2403010 | 0.0201744 | -0.1405970 |
| | 16 | 0.0071620 | 0.0843253 | 0.9902890 | 0.0980647 |
| | 17 | 0.0000763 | 0.0087354 | 0.0001005 | 0.0100259 |
| | 18 | 0.0000015 | 0.0012389 | 0.0000010 | 0.0009804 |
| | 19 | 0.0000000 | 0.0001724 | 0.0000000 | 0.0001080 |
| 13.060 | 0 | 0.0592692 | 0.2361280 | 0.0495446 | 0.2170020 |
| | 1 | 0.0495169 | 0.2169450 | 0.0592692 | 0.2361280 |
| | 2 | 0.0254498 | 0.1574870 | 0.0494891 | 0.2168870 |
| | 3 | 0.0457059 | 0.2088460 | 0.0055149 | 0.0740573 |
| | 4 | 0.0076131 | -0.0869204 | 0.0422906 | 0.2012510 |
| | 5 | 0.0075137 | 0.0863553 | 0.0670666 | -0.2501370 |
| | 6 | 0.1598940 | -0.3665070 | 0.0000803 | -0.0089605 |
| | 7 | 0.1177860 | -0.3223550 | 0.3267820 | -0.4690370 |
| | 8 | 0.3275100 | -0.4693050 | 0.3496670 | -0.4768650 |
| | 9 | 0.7183880 | -0.4497850 | 0.3282130 | -0.4695630 |
| | 10 | 0.8519290 | -0.3551700 | 0.9972190 | -0.0526588 |
| | 11 | 0.9972610 | -0.0522611 | 0.9958130 | -0.0645684 |
| | 12 | 0.7970740 | 0.4021780 | 0.9973040 | -0.0518466 |
| | 13 | 0.0768395 | 0.2663370 | 0.0097956 | 0.0984868 |
| | 14 | 0.0061289 | -0.0780469 | 0.0275928 | -0.1638030 |
| | 15 | 0.0395452 | -0.1948880 | 0.0194469 | -0.1380890 |
| | 16 | 0.0186479 | 0.1352780 | 0.0924320 | -0.2896350 |
| | 17 | 0.0001345 | 0.0115970 | 0.0002171 | 0.0147315 |
| | 18 | 0.0000026 | 0.0016261 | 0.0000018 | 0.0013537 |
| | 19 | 0.0000001 | 0.0002286 | 0.0000000 | 0.0001488 |

Table 3

Real and Imaginary Parts of the Scattering Coefficients
A(N) and B(N) for the Isotropic, Dielectric, Infinite
Circular Cylinder. Refractive Index $m = 1.600$.

Range of Circumference to Wavelength Ratio; $x = \pi a/\lambda$,

| | | |
|--------|-----------|--------|
| 0.100 | { 0.100 } | 8.200 |
| 8.600 | { 0.600 } | 11.000 |
| 8.700 | { 0.600 } | 11.100 |
| 8.800 | { 0.600 } | 10.600 |
| 11.800 | { 0.200 } | 12.800 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|-----------|
| 0.100 | 0 | 0. | 0. | 0. | 0.0124787 |
| | 1 | 0. | 0. | 0. | 0. |
| 0.200 | 0 | 0.0000001 | 0.0002461 | 0.0026624 | 0.0515293 |
| | 1 | 0.0001923 | 0.0138646 | 0.0000001 | 0.0002461 |
| 0.300 | 0 | 0.0000016 | 0.0012532 | 0.0143703 | 0.1190120 |
| | 1 | 0.0009745 | 0.0312010 | 0.0000016 | 0.0012532 |
| | 2 | 0.0000001 | 0.0003457 | 0. | 0. |
| 0.400 | 0 | 0.0000160 | 0.0039986 | 0.0469797 | 0.2115950 |
| | 1 | 0.0030488 | 0.0513134 | 0.0000160 | 0.0039986 |
| | 2 | 0.0000012 | 0.0010863 | 0. | 0. |
| 0.500 | 0 | 0.0000980 | 0.0098985 | 0.1118390 | 0.3151680 |
| | 1 | 0.0072593 | 0.0848918 | 0.0000980 | 0.0098985 |
| | 2 | 0.0000069 | 0.00126333 | 0. | 0. |
| 0.600 | 0 | 0.0004376 | 0.0209155 | 0.2087690 | 0.4064290 |
| | 1 | 0.0144243 | 0.1192320 | 0.0004376 | 0.0209155 |
| | 2 | 0.0000293 | 0.0054155 | 0.0000001 | 0.0002957 |
| 0.700 | 0 | 0.0015778 | 0.0396908 | 0.3207160 | 0.4667520 |
| | 1 | 0.0251188 | 0.1564860 | 0.0015778 | 0.0396908 |
| | 2 | 0.0000988 | 0.0099393 | 0.0000006 | 0.0007449 |
| | 3 | 0.0000000 | 0.0002013 | 0. | 0. |
| 0.800 | 0 | 0.0048784 | 0.0696747 | 0.4248800 | 0.4943250 |
| | 1 | 0.0395025 | 0.1947870 | 0.0048784 | 0.0696747 |
| | 2 | 0.0002816 | 0.0167784 | 0.0000027 | 0.0016599 |
| | 3 | 0.0000002 | 0.0004426 | 0. | 0. |
| 0.900 | 0 | 0.0134228 | 0.1150770 | 0.5072380 | 0.4999480 |
| | 1 | 0.0572783 | 0.2323740 | 0.0134228 | 0.1150770 |
| | 2 | 0.0007059 | 0.0265588 | 0.0000114 | 0.0033708 |
| | 3 | 0.0000008 | 0.0008840 | 0. | 0. |
| 1.000 | 0 | 0.0335581 | 0.1800890 | 0.5651590 | 0.4957360 |
| | 1 | 0.0778177 | 0.2678840 | 0.0335581 | 0.1800890 |
| | 2 | 0.0015974 | 0.0399362 | 0.0000405 | 0.0063674 |
| | 3 | 0.0000027 | 0.0016366 | 0.0000000 | 0.0001274 |
| 1.100 | 0 | 0.0767047 | 0.2661220 | 0.6022360 | 0.4894360 |
| | 1 | 0.1004120 | 0.3005480 | 0.0767047 | 0.2661220 |
| | 2 | 0.0033240 | 0.0575580 | 0.001290 | 0.0113578 |
| | 3 | 0.0000081 | 0.0028496 | 0.0000001 | 0.0002712 |
| 1.200 | 0 | 0.1588400 | 0.3655270 | 0.6236660 | 0.4844650 |
| | 1 | 0.1245590 | 0.3302190 | 0.1588400 | 0.3655270 |
| | 2 | 0.0064425 | 0.0800065 | 0.0003745 | 0.0193487 |
| | 3 | 0.0000222 | 0.0047162 | 0.0000003 | 0.0005402 |
| | 4 | 0.0000000 | 0.0001425 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|-----------|-----------|-----------|---------|
| 1.300 | 0 | 0.2913990 | 0.4544070 | 0.6342760 | 0.4816320 | |
| | 1 | 0.1502140 | 0.3572810 | 0.2913990 | 0.4544070 | |
| | 2 | 0.0117401 | 0.1077140 | 0.0010097 | 0.0317596 | |
| | 3 | 0.0000559 | 0.0074799 | 0.0000010 | 0.0010180 | |
| | 4 | 0.0000001 | 0.0002650 | 0. | 0. | |
| 1.400 | 0 | 0.4627220 | 0.4986080 | 0.6381280 | 0.4805420 | |
| | 1 | 0.1779670 | 0.3824850 | 0.4627220 | 0.4986080 | |
| | 2 | 0.0202480 | 0.1408470 | 0.0025650 | 0.0505807 | |
| | 3 | 0.0001309 | 0.0114411 | 0.0000033 | 0.0018310 | |
| | 4 | 0.0000002 | 0.0004693 | 0. | 0. | |
| 1.500 | 0 | 0.6339820 | 0.4817150 | 0.6386990 | 0.4803780 | |
| | 1 | 0.2091850 | 0.4067260 | 0.6339820 | 0.4817150 | |
| | 2 | 0.0332076 | 0.1791780 | 0.0062124 | 0.0785736 | |
| | 3 | 0.0002878 | 0.0169630 | 0.0000100 | 0.0031651 | |
| | 4 | 0.0000006 | 0.0007970 | 0. | 0. | |
| 1.600 | 0 | 0.7685750 | 0.4217440 | 0.6391740 | 0.4802400 | |
| | 1 | 0.2461470 | 0.4307650 | 0.7685750 | 0.4217440 | |
| | 2 | 0.0519648 | 0.2219560 | 0.0144772 | 0.1194470 | |
| | 3 | 0.0005995 | 0.0244777 | 0.0000280 | 0.0052893 | |
| | 4 | 0.0000017 | 0.0013049 | 0.0000000 | 0.0001627 | |
| 1.700 | 0 | 0.8569150 | 0.3501590 | 0.6427260 | 0.4791970 | |
| | 1 | 0.2921820 | 0.4547650 | 0.8569150 | 0.3501590 | |
| | 2 | 0.0777891 | 0.2678390 | 0.0326463 | 0.1777090 | |
| | 3 | 0.0011910 | 0.0344903 | 0.0000737 | 0.0085870 | |
| | 4 | 0.0000043 | 0.0020685 | 0.0000001 | 0.0002947 | |
| 1.800 | 0 | 0.9088540 | 0.2878160 | 0.6527270 | 0.4761030 | |
| | 1 | 0.3517040 | 0.4775020 | 0.9088540 | 0.2878160 | |
| | 2 | 0.1116530 | 0.3149390 | 0.0712220 | 0.2571950 | |
| | 3 | 0.0022690 | 0.0475805 | 0.0001851 | 0.0136022 | |
| | 4 | 0.0000102 | 0.0031868 | 0.0000003 | 0.0005157 | |
| | 5 | 0.0000000 | 0.0001319 | 0. | 0. | |
| 1.900 | 0 | 0.9376590 | 0.2417740 | 0.6728730 | 0.4691640 | |
| | 1 | 0.4297610 | 0.4950420 | 0.9376590 | 0.2417740 | |
| | 2 | 0.1540410 | 0.3609880 | 0.1486420 | 0.3557350 | |
| | 3 | 0.0041643 | 0.0643973 | 0.0004456 | 0.0211052 | |
| | 4 | 0.0000229 | 0.0047870 | 0.0000008 | 0.0008753 | |
| | 5 | 0.0000000 | 0.0002208 | 0. | 0. | |
| 2.000 | 0 | 0.9530660 | 0.2114980 | 0.7070070 | 0.4551350 | |
| | 1 | 0.5302140 | 0.4990860 | 0.9530660 | 0.2114980 | |
| | 2 | 0.2048880 | 0.4036200 | 0.2881410 | 0.4528970 | |
| | 3 | 0.0073890 | 0.0856411 | 0.0010372 | 0.0321893 | |
| | 4 | 0.0000494 | 0.0070298 | 0.0000021 | 0.0014457 | |
| | 5 | 0.0000001 | 0.0003591 | 0. | 0. | |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 2.100 | 0 | 0.9609090 | 0.1938110 | 0.7582020 | 0.4281720 |
| | 1 | 0.6514910 | 0.4764980 | 0.9609090 | 0.1938110 |
| | 2 | 0.2636860 | 0.4406310 | 0.4941850 | 0.4999660 |
| | 3 | 0.0127108 | 0.1120230 | 0.0023496 | 0.0484161 |
| | 4 | 0.0001023 | 0.0101161 | 0.0000054 | 0.0023313 |
| | 5 | 0.0000003 | 0.0005689 | 0. | 0. |
| 2.200 | 0 | 0.9644710 | 0.1851130 | 0.8262140 | 0.3789250 |
| | 1 | 0.7808770 | 0.4136520 | 0.9644710 | 0.1851130 |
| | 2 | 0.3297480 | 0.4701220 | 0.7177450 | 0.4500970 |
| | 3 | 0.0212415 | 0.1441880 | 0.0052149 | 0.0720258 |
| | 4 | 0.0002044 | 0.0142948 | 0.0000135 | 0.0036804 |
| | 5 | 0.0000008 | 0.0008805 | 0.0000000 | 0.0001438 |
| 2.300 | 0 | 0.9656730 | 0.1820660 | 0.9028570 | 0.2961520 |
| | 1 | 0.8942100 | 0.3075680 | 0.9656730 | 0.1820660 |
| | 2 | 0.4024970 | 0.4904010 | 0.8839950 | 0.3202310 |
| | 3 | 0.0345266 | 0.1825770 | 0.0114125 | 0.1062180 |
| | 4 | 0.0003950 | 0.0198708 | 0.0000325 | 0.0057022 |
| | 5 | 0.0000018 | 0.0013337 | 0.0000001 | 0.0002411 |
| 2.400 | 0 | 0.9658260 | 0.1816750 | 0.9685550 | 0.1745170 |
| | 1 | 0.9685400 | 0.1745570 | 0.9658260 | 0.1816750 |
| | 2 | 0.4816220 | 0.4996620 | 0.9685250 | 0.1745960 |
| | 3 | 0.0546083 | 0.2272140 | 0.0247638 | 0.1554050 |
| | 4 | 0.0007413 | 0.0272162 | 0.0000755 | 0.0086914 |
| | 5 | 0.0000039 | 0.0019809 | 0.0000001 | 0.0003953 |
| 2.500 | 0 | 0.9660350 | 0.1811390 | 0.9993100 | 0.0262524 |
| | 1 | 0.9982260 | 0.0420872 | 0.9660350 | 0.1811390 |
| | 2 | 0.5669460 | 0.4954980 | 0.9968440 | 0.0560923 |
| | 3 | 0.0840079 | 0.2774000 | 0.0534475 | 0.2249240 |
| | 4 | 0.0013547 | 0.0367811 | 0.0001706 | 0.0130624 |
| | 5 | 0.0000083 | 0.0028899 | 0.0000004 | 0.0006349 |
| 2.600 | 0 | 0.9673800 | 0.1776390 | 0.9855090 | -0.1195040 |
| | 1 | 0.9952160 | -0.0690037 | 0.9673800 | 0.1776390 |
| | 2 | 0.6578330 | 0.4744350 | 0.9992810 | -0.0267970 |
| | 3 | 0.1255490 | 0.3313400 | 0.1143100 | 0.3181870 |
| | 4 | 0.0024173 | 0.0491069 | 0.0003765 | 0.0194012 |
| | 5 | 0.0000172 | 0.0041476 | 0.0000010 | 0.0010009 |
| 2.700 | 0 | 0.9709150 | 0.1680450 | 0.9404110 | -0.2367240 |
| | 1 | 0.9763560 | -0.1519390 | 0.9709150 | 0.1680450 |
| | 2 | 0.7520380 | 0.4318300 | 0.9934960 | -0.0803837 |
| | 3 | 0.1819340 | 0.3857900 | 0.2372470 | 0.4253950 |
| | 4 | 0.0042218 | 0.0648380 | 0.0008154 | 0.0285430 |
| | 5 | 0.0000344 | 0.0058637 | 0.0000024 | 0.0015514 |
| | 6 | 0.0000001 | 0.0003694 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 2.800 | 0 | 0.9774200 | 0.1485600 | 0.8861630 | -0.3176130 |
| | 1 | 0.9540140 | -0.2094540 | 0.9774200 | 0.1485600 |
| | 2 | 0.8441370 | 0.3627250 | 0.9870590 | -0.1130190 |
| | 3 | 0.2550470 | 0.4358880 | 0.4524350 | 0.4977320 |
| | 4 | 0.0072315 | 0.0847302 | 0.0017413 | 0.0416923 |
| | 5 | 0.0000669 | 0.0081767 | 0.0000056 | 0.0023680 |
| | 6 | 0.0000003 | 0.0005532 | 0.0000000 | 0.0001082 |
| 2.900 | 0 | 0.9867500 | 0.1143460 | 0.8383250 | -0.3681520 |
| | 1 | 0.9344890 | -0.2474260 | 0.9867490 | 0.1143460 |
| | 2 | 0.9243910 | 0.2643710 | 0.9824190 | -0.1314230 |
| | 3 | 0.3450770 | 0.4753930 | 0.7264910 | 0.4457600 |
| | 4 | 0.0121705 | 0.1096470 | 0.0036874 | 0.0606118 |
| | 5 | 0.0001268 | 0.0112596 | 0.0000127 | 0.0035653 |
| | 6 | 0.0000007 | 0.0008154 | 0.0000000 | 0.0001733 |
| 3.000 | 0 | 0.9964570 | 0.0594187 | 0.8029100 | -0.3978010 |
| | 1 | 0.9198680 | -0.2714980 | 0.9964570 | 0.0594187 |
| | 2 | 0.9799650 | 0.1401200 | 0.9798560 | -0.1404920 |
| | 3 | 0.4497470 | 0.4974680 | 0.9312480 | 0.2530320 |
| | 4 | 0.0201536 | 0.1405260 | 0.0077894 | 0.0879130 |
| | 5 | 0.0002350 | 0.0153277 | 0.0000281 | 0.0053028 |
| | 6 | 0.0000014 | 0.0011841 | 0.0000001 | 0.0002730 |
| 3.100 | 0 | 0.9995060 | -0.0222189 | 0.7800040 | -0.4142430 |
| | 1 | 0.9100220 | -0.2861500 | 0.9995060 | -0.0222189 |
| | 2 | 0.9999960 | 0.0019817 | 0.9788590 | -0.1438540 |
| | 3 | 0.5640210 | 0.4952840 | 0.9989640 | 0.0321633 |
| | 4 | 0.0328674 | 0.1782900 | 0.0165226 | 0.1274740 |
| | 5 | 0.0004265 | 0.0206485 | 0.0000609 | 0.0078029 |
| | 6 | 0.0000029 | 0.0016956 | 0.0000002 | 0.0004233 |
| 3.200 | 0 | 0.9821610 | -0.1323650 | 0.7672430 | -0.4225890 |
| | 1 | 0.9038420 | -0.2948080 | 0.9821610 | -0.1323650 |
| | 2 | 0.9822130 | -0.1321750 | 0.9786930 | -0.1444050 |
| | 3 | 0.6805000 | 0.4662830 | 0.9822670 | -0.1319810 |
| | 4 | 0.0528032 | 0.2236400 | 0.0354272 | 0.1848570 |
| | 5 | 0.0007598 | 0.0275544 | 0.0001295 | 0.0113782 |
| | 6 | 0.0000057 | 0.0023973 | 0.0000004 | 0.0006477 |
| 3.300 | 0 | 0.9266970 | -0.2606330 | 0.7616140 | -0.4260960 |
| | 1 | 0.8998500 | -0.3002000 | 0.9266970 | -0.2606330 |
| | 2 | 0.9350430 | -0.2464500 | 0.9786010 | -0.1447110 |
| | 3 | 0.7903550 | 0.4070550 | 0.9417790 | -0.2341600 |
| | 4 | 0.0835048 | 0.2766440 | 0.0771238 | 0.2667880 |
| | 5 | 0.0013309 | 0.0364571 | 0.0002713 | 0.0164688 |
| | 6 | 0.0000112 | 0.0033492 | 0.0000010 | 0.0009782 |
| | 7 | 0.0000000 | 0.0002282 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 3.400 | 0 | 0.8246800 | -0.3802410 | 0.7601430 | -0.4269960 |
| | 1 | 0.8964330 | -0.3046980 | 0.8246800 | -0.3802410 |
| | 2 | 0.8727330 | -0.3332720 | 0.9778090 | -0.1473040 |
| | 3 | 0.8844320 | 0.3197060 | 0.9042900 | -0.2941930 |
| | 4 | 0.1297120 | 0.3359860 | 0.1694820 | 0.3751770 |
| | 5 | 0.0022966 | 0.0478676 | 0.0005621 | 0.0237030 |
| | 6 | 0.0000214 | 0.0046274 | 0.0000021 | 0.0014599 |
| 3.500 | 7 | 0.0000001 | 0.0003345 | 0. | 0. |
| | 0 | 0.6916570 | -0.4618090 | 0.7600310 | -0.4270640 |
| | 1 | 0.8918540 | -0.3105650 | 0.6916570 | -0.4618090 |
| | 2 | 0.8083900 | -0.3935680 | 0.9753960 | -0.1549140 |
| | 3 | 0.9542850 | 0.2080670 | 0.8766830 | -0.3288010 |
| | 4 | 0.1970920 | 0.3978020 | 0.3617840 | 0.4805170 |
| | 5 | 0.0039115 | 0.0624195 | 0.0011567 | 0.0339912 |
| 3.600 | 6 | 0.0000400 | 0.0063279 | 0.0000046 | 0.0021553 |
| | 7 | 0.0000002 | 0.0004840 | 0.0000000 | 0.0001156 |
| 3.700 | 0 | 0.5593190 | -0.4964690 | 0.7585590 | -0.4279570 |
| | 1 | 0.8841020 | -0.3201020 | 0.5593190 | -0.4964690 |
| | 2 | 0.7503040 | -0.4328370 | 0.9699810 | -0.1706410 |
| | 3 | 0.9932020 | 0.0821681 | 0.8587500 | -0.3482800 |
| | 4 | 0.2910020 | 0.4542240 | 0.6726920 | 0.4692310 |
| | 5 | 0.0065876 | 0.0808963 | 0.0023753 | 0.0486790 |
| | 6 | 0.0000735 | 0.0085718 | 0.0000099 | 0.0031511 |
| 3.800 | 7 | 0.0000005 | 0.0006922 | 0.0000000 | 0.0001774 |
| | 0 | 0.4514430 | -0.4976370 | 0.7528650 | -0.4313460 |
| | 1 | 0.8705830 | -0.3356610 | 0.4514430 | -0.4976370 |
| | 2 | 0.7020060 | -0.4573770 | 0.9591250 | -0.1980010 |
| | 3 | 0.9974700 | -0.0502323 | 0.8484290 | -0.3586050 |
| | 4 | 0.4130410 | 0.4924660 | 0.9417780 | 0.2341630 |
| | 5 | 0.0109905 | 0.1042580 | 0.0048959 | 0.0697996 |
| 3.900 | 6 | 0.0001325 | 0.0115106 | 0.0000209 | 0.0045673 |
| | 7 | 0.0000010 | 0.0009788 | 0.0000001 | 0.0002688 |
| 3.800 | 0 | 0.3744100 | -0.4839700 | 0.7396000 | -0.4388530 |
| | 1 | 0.8476170 | -0.3593920 | 0.3744100 | -0.4839700 |
| | 2 | 0.6638690 | -0.4723840 | 0.9383250 | -0.2405650 |
| | 3 | 0.9676600 | -0.1769020 | 0.8434580 | -0.3633680 |
| | 4 | 0.5597780 | 0.4964140 | 0.9951520 | -0.0694579 |
| | 5 | 0.0181950 | 0.1336560 | 0.0102031 | 0.1004940 |
| | 6 | 0.0002352 | 0.0153345 | 0.0000432 | 0.0065704 |
| 3.900 | 7 | 0.0000019 | 0.0013693 | 0.0000002 | 0.0004028 |
| | 0 | 0.3240330 | -0.4680120 | 0.7144770 | -0.4516630 |
| | 1 | 0.8098110 | -0.3924500 | 0.3240330 | -0.4680120 |
| | 2 | 0.6346190 | -0.4815370 | 0.8996340 | -0.3004870 |
| | 3 | 0.9091740 | -0.2873610 | 0.8417880 | -0.3649390 |
| | 4 | 0.7135750 | 0.4520900 | 0.9204000 | -0.2706730 |
| | 5 | 0.0299352 | 0.1704090 | 0.0216898 | 0.1456680 |
| 4.000 | 6 | 0.0004115 | 0.0202825 | 0.0000882 | 0.0093928 |
| | 7 | 0.0000036 | 0.0018966 | 0.0000004 | 0.0005972 |
| | 8 | 0.0000000 | 0.0001370 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 4.000 | 0 | 0.2934360 | -0.4553370 | 0.6718410 | -0.4695430 |
| | 1 | 0.7497400 | -0.4331630 | 0.2934360 | -0.4553370 |
| | 2 | 0.6122820 | -0.4872300 | 0.8309950 | -0.3747560 |
| | 3 | 0.8312480 | -0.3745330 | 0.8416010 | -0.3651140 |
| | 4 | 0.8509900 | 0.3560980 | 0.8314930 | -0.3743160 |
| | 5 | 0.0489968 | 0.2158610 | 0.0475159 | 0.2127400 |
| | 6 | 0.0007110 | 0.0266554 | 0.0001786 | 0.0133620 |
| | 7 | 0.0000068 | 0.0026026 | 0.0000008 | 0.0008769 |
| | 8 | 0.0000000 | 0.0001978 | 0. | 0. |
| 4.100 | 0 | 0.2765130 | -0.4472740 | 0.6048310 | -0.4888870 |
| | 1 | 0.6593070 | -0.4739420 | 0.2765130 | -0.4472740 |
| | 2 | 0.5946380 | -0.4909620 | 0.7199210 | -0.4490380 |
| | 3 | 0.7445090 | -0.4361370 | 0.8412070 | -0.3654830 |
| | 4 | 0.9490730 | 0.2198480 | 0.7633500 | -0.4250250 |
| | 5 | 0.0797941 | 0.2709740 | 0.1081490 | 0.3105690 |
| | 6 | 0.0012149 | 0.0348337 | 0.0003590 | 0.0189446 |
| | 7 | 0.0000125 | 0.0035402 | 0.0000016 | 0.0012760 |
| | 8 | 0.0000001 | 0.0002824 | 0. | 0. |
| 4.200 | 0 | 0.2685570 | -0.4432090 | 0.5076710 | -0.4999410 |
| | 1 | 0.5352270 | -0.4987570 | 0.2685570 | -0.4432090 |
| | 2 | 0.5793780 | -0.4936590 | 0.5661010 | -0.4956110 |
| | 3 | 0.6583220 | -0.4742720 | 0.8388810 | -0.3676410 |
| | 4 | 0.9957660 | 0.0649279 | 0.7174430 | -0.4502430 |
| | 5 | 0.1290860 | 0.3352950 | 0.2531580 | 0.4348200 |
| | 6 | 0.0020564 | 0.0453014 | 0.0007197 | 0.0268131 |
| | 7 | 0.0000228 | 0.0047767 | 0.0000034 | 0.0018419 |
| | 8 | 0.0000002 | 0.0003992 | 0.0000000 | 0.0001111 |
| 4.300 | 0 | 0.2659420 | -0.4418340 | 0.3820550 | -0.4858900 |
| | 1 | 0.3882300 | -0.4873470 | 0.2459420 | -0.4418340 |
| | 2 | 0.5640990 | -0.4958740 | 0.3948070 | -0.4888090 |
| | 3 | 0.5791450 | -0.4936960 | 0.8326380 | -0.3732990 |
| | 4 | 0.9924210 | -0.0867281 | 0.6885580 | -0.4630830 |
| | 5 | 0.2064090 | 0.4047270 | 0.5593700 | 0.4964630 |
| | 6 | 0.0034550 | 0.0586773 | 0.0014451 | 0.0379870 |
| | 7 | 0.0000409 | 0.0063965 | 0.0000070 | 0.0026392 |
| | 8 | 0.0000003 | 0.0005592 | 0.0000000 | 0.0001655 |
| 4.400 | 0 | 0.2656660 | -0.4416870 | 0.2452120 | -0.4302130 |
| | 1 | 0.2453900 | -0.4303180 | 0.2656660 | -0.4416870 |
| | 2 | 0.5462140 | -0.4978600 | 0.2455670 | -0.4304230 |
| | 3 | 0.5102760 | -0.4998940 | 0.8198770 | -0.3842900 |
| | 4 | 0.9490960 | -0.2198010 | 0.6716410 | -0.4696160 |
| | 5 | 0.3227440 | 0.4675260 | 0.9217410 | 0.2685790 |
| | 6 | 0.0057726 | 0.0757580 | 0.0029227 | 0.0539830 |
| | 7 | 0.0000724 | 0.0085062 | 0.0000141 | 0.0037574 |
| | 8 | 0.0000006 | 0.0007760 | 0.0000001 | 0.0002440 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 4.500 | 0 | 0.2649730 | -0.4413190 | 0.1269220 | -0.3328860 |
| | 1 | 0.1342610 | -0.3409320 | 0.2649730 | -0.4413190 |
| | 2 | 0.5228220 | -0.4994790 | 0.1412380 | -0.3482660 |
| | 3 | 0.4525160 | -0.4977400 | 0.7968520 | -0.4023420 |
| | 4 | 0.8784180 | -0.3268020 | 0.6627990 | -0.4727540 |
| | 5 | 0.4841050 | 0.4997470 | 0.9820670 | -0.1327070 |
| | 6 | 0.096125 | 0.0975712 | 0.0059985 | 0.0772171 |
| | 7 | 0.0001264 | 0.0112403 | 0.0000283 | 0.0053200 |
| | 8 | 0.0000011 | 0.0010680 | 0.0000001 | 0.0003568 |
| 4.600 | 0 | 0.2610920 | -0.4392300 | 0.0491932 | -0.2162710 |
| | 1 | 0.0641623 | -0.2450420 | 0.2610920 | -0.4392300 |
| | 2 | 0.4965980 | -0.4999120 | 0.0790847 | -0.2698710 |
| | 3 | 0.4050890 | -0.4909090 | 0.7579240 | -0.4283400 |
| | 4 | 0.7918390 | -0.4059930 | 0.6590920 | -0.4740140 |
| | 5 | 0.6774950 | 0.4674350 | 0.8389570 | -0.3675710 |
| | 6 | 0.0159906 | 0.1254390 | 0.0126169 | 0.1116140 |
| | 7 | 0.0002182 | 0.0147685 | 0.0000562 | 0.0074989 |
| | 8 | 0.0000021 | 0.0014579 | 0.0000003 | 0.0005175 |
| 4.700 | 0 | 0.2510630 | -0.4336250 | 0.0117978 | -0.1079750 |
| | 1 | 0.0270777 | -0.1623100 | 0.2510630 | -0.4336250 |
| | 2 | 0.4458340 | -0.4970570 | 0.0454907 | -0.2083780 |
| | 3 | 0.3664070 | -0.4818230 | 0.6949060 | -0.4604470 |
| | 4 | 0.6984240 | -0.4589420 | 0.6581970 | -0.4743140 |
| | 5 | 0.8594890 | 0.3475160 | 0.7023590 | -0.4572210 |
| | 6 | 0.0266401 | 0.1610290 | 0.0275631 | 0.1637170 |
| | 7 | 0.0003729 | 0.0193062 | 0.0001110 | 0.0105355 |
| | 8 | 0.0000039 | 0.0019750 | 0.0000006 | 0.0007449 |
| 4.800 | 0 | 0.2317300 | -0.4219370 | 0.0005408 | -0.0232484 |
| | 1 | 0.0101111 | -0.1000440 | 0.2317300 | -0.4219370 |
| | 2 | 0.3849630 | -0.4865870 | 0.0282600 | -0.1657150 |
| | 3 | 0.3345640 | -0.4718380 | 0.5978920 | -0.4903240 |
| | 4 | 0.6049030 | -0.4888720 | 0.6581130 | -0.4743420 |
| | 5 | 0.9744720 | 0.1577230 | 0.6109530 | -0.4875340 |
| | 6 | 0.0445581 | 0.2063320 | 0.0636265 | 0.2440860 |
| | 7 | 0.0006318 | 0.0251284 | 0.0002183 | 0.0147734 |
| | 8 | 0.0000071 | 0.0026563 | 0.0000011 | 0.0010645 |
| 4.900 | 0 | 0.2000830 | -0.4000620 | 0.0012871 | 0.0358531 |
| | 1 | 0.0033117 | -0.0574521 | 0.2000830 | -0.4000620 |
| | 2 | 0.3062000 | -0.4609140 | 0.0197124 | -0.1390100 |
| | 3 | 0.3075850 | -0.4614940 | 0.4611920 | -0.4984920 |
| | 4 | 0.5160250 | -0.4997430 | 0.6569370 | -0.4747320 |
| | 5 | 0.9976590 | -0.0483244 | 0.5541370 | -0.4970600 |
| | 6 | 0.0749724 | 0.2633470 | 0.1575790 | 0.3643460 |
| | 7 | 0.0010632 | 0.0325891 | 0.0004291 | 0.0207114 |
| | 8 | 0.0000126 | 0.0035490 | 0.0000023 | 0.0015119 |
| | 9 | 0.0000001 | 0.0003173 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 5.000 | 0 | 0.1544590 | -0.3613880 | 0.0054407 | 0.0735602 |
| | 1 | 0.0009423 | -0.0306820 | 0.1544590 | -0.3613880 |
| | 2 | 0.2129370 | -0.4093840 | 0.0156844 | -0.1242510 |
| | 3 | 0.2835260 | -0.4507100 | 0.2971170 | -0.4569880 |
| | 4 | 0.4348730 | -0.4957400 | 0.6526330 | -0.4761330 |
| | 5 | 0.9474180 | -0.2231970 | 0.5197700 | -0.4996090 |
| | 6 | 0.1269310 | 0.3328960 | 0.4065640 | 0.4911920 |
| | 7 | 0.0017796 | 0.0421475 | 0.0008469 | 0.0290887 |
| | 8 | 0.0000222 | 0.0047120 | 0.0000046 | 0.0021348 |
| | 9 | 0.0000002 | 0.0004376 | 0.0000000 | 0.0001453 |
| 5.100 | 0 | 0.0973513 | -0.2964360 | 0.0091847 | 0.0953959 |
| | 1 | 0.0002383 | -0.0154359 | 0.0973513 | -0.2964360 |
| | 2 | 0.1177910 | -0.3223600 | 0.0140303 | -0.1176160 |
| | 3 | 0.2604870 | -0.4389000 | 0.1444080 | -0.3515030 |
| | 4 | 0.3631160 | -0.4808980 | 0.6427850 | -0.4791790 |
| | 5 | 0.8577400 | -0.3493160 | 0.4997470 | -0.5000000 |
| | 6 | 0.2152890 | 0.4110230 | 0.8560220 | 0.3510680 |
| | 7 | 0.0029690 | 0.0544078 | 0.0016868 | 0.0410361 |
| | 8 | 0.0000387 | 0.0062204 | 0.0000090 | 0.0029996 |
| | 9 | 0.0000004 | 0.0005991 | 0.0000000 | 0.0002101 |
| 5.200 | 0 | 0.0398374 | -0.1955770 | 0.0114306 | 0.1063010 |
| | 1 | 0.0000611 | -0.0078189 | 0.0398374 | -0.1955770 |
| | 2 | 0.0418731 | -0.2002990 | 0.0135793 | -0.1157360 |
| | 3 | 0.2365980 | -0.4249930 | 0.0441158 | -0.2053520 |
| | 4 | 0.3012630 | -0.4588070 | 0.6242620 | -0.4843130 |
| | 5 | 0.7546520 | -0.4302940 | 0.4889350 | -0.4998780 |
| | 6 | 0.3602750 | 0.4800600 | 0.9737150 | -0.1599830 |
| | 7 | 0.0049488 | 0.0701737 | 0.0034159 | 0.0583457 |
| | 8 | 0.0000667 | 0.0081687 | 0.0000176 | 0.0041972 |
| | 9 | 0.0000007 | 0.0008144 | 0.0000001 | 0.0003018 |
| 5.300 | 0 | 0.0033725 | -0.0579757 | 0.0123305 | 0.1103560 |
| | 1 | 0.0000195 | -0.0044152 | 0.0033725 | -0.0579757 |
| | 2 | 0.0036292 | -0.0601338 | 0.0135472 | -0.1156010 |
| | 3 | 0.2100520 | -0.4073450 | 0.0038833 | -0.0621948 |
| | 4 | 0.2489440 | -0.4324010 | 0.5927930 | -0.4913140 |
| | 5 | 0.6519800 | -0.4763420 | 0.4839440 | -0.4997420 |
| | 6 | 0.5736400 | 0.4945470 | 0.7516410 | -0.4320610 |
| | 7 | 0.0082636 | 0.0905279 | 0.0071043 | 0.0839873 |
| | 8 | 0.0001140 | 0.0106769 | 0.0000343 | 0.0058540 |
| | 9 | 0.0000012 | 0.0010996 | 0.0000002 | 0.0004305 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 5.400 | 0 | 0.0096668 | 0.0978436 | 0.0124791 | 0.1110110 |
| | 1 | 0.0000045 | -0.0021148 | 0.0096668 | 0.0978436 |
| | 2 | 0.0052968 | 0.0725861 | 0.0132500 | -0.1143440 |
| | 3 | 0.1792320 | -0.3835470 | 0.0025626 | 0.0505578 |
| | 4 | 0.2052090 | -0.4038540 | 0.5425560 | -0.4981860 |
| | 5 | 0.5554850 | -0.4969120 | 0.4823390 | -0.4996880 |
| | 6 | 0.8165620 | 0.3870250 | 0.5719840 | -0.4947910 |
| | 7 | 0.0130684 | 0.1169450 | 0.0153982 | 0.1231300 |
| | 8 | 0.0001932 | 0.0138978 | 0.0000664 | 0.0081471 |
| | 9 | 0.0000022 | 0.0014752 | 0.0000004 | 0.0006104 |
| | 10 | 0.0000000 | 0.0001296 | 0. | 0. |
| 5.500 | 0 | 0.0610559 | 0.2394330 | 0.0125682 | 0.1114010 |
| | 1 | 0.0000045 | 0.0021206 | 0.0610559 | 0.2394330 |
| | 2 | 0.0334230 | 0.1797380 | 0.0120221 | -0.1089840 |
| | 3 | 0.1430830 | -0.3501570 | 0.0168602 | 0.1287480 |
| | 4 | 0.1687890 | -0.3745660 | 0.4663880 | -0.4988690 |
| | 5 | 0.4670290 | -0.4989120 | 0.4821780 | -0.4996820 |
| | 6 | 0.9782450 | 0.1458230 | 0.4676390 | -0.4989520 |
| | 7 | 0.0234833 | 0.1514320 | 0.0355428 | 0.1851470 |
| | 8 | 0.0003251 | 0.0180273 | 0.0001283 | 0.0113285 |
| | 9 | 0.0000039 | 0.0019672 | 0.0000007 | 0.0008606 |
| | 10 | 0.0000000 | 0.0001791 | 0. | 0. |
| 5.600 | 0 | 0.1368910 | 0.3437320 | 0.0133183 | 0.1146340 |
| | 1 | 0.0001323 | 0.0115021 | 0.1368910 | 0.3437320 |
| | 2 | 0.0711059 | 0.2570020 | 0.0093294 | -0.0961374 |
| | 3 | 0.1018930 | -0.3025070 | 0.0331386 | 0.1789980 |
| | 4 | 0.1383050 | -0.3452200 | 0.3585570 | -0.4795770 |
| | 5 | 0.3869820 | -0.4870590 | 0.4817080 | -0.4996650 |
| | 6 | 0.9839680 | -0.1255990 | 0.4081450 | -0.4914900 |
| | 7 | 0.0403038 | 0.1966710 | 0.0901172 | 0.2863500 |
| | 8 | 0.0005440 | 0.0233186 | 0.0002485 | 0.0157623 |
| | 9 | 0.0000068 | 0.0026084 | 0.0000015 | 0.0012072 |
| | 10 | 0.0000001 | 0.0002458 | 0. | 0. |
| 5.700 | 0 | 0.2123970 | 0.4090040 | 0.0156256 | 0.1240220 |
| | 1 | 0.0008797 | 0.0296465 | 0.2123970 | 0.4090040 |
| | 2 | 0.1048130 | 0.3088760 | 0.0051648 | -0.0716809 |
| | 3 | 0.0586677 | -0.2350020 | 0.0459445 | 0.2093650 |
| | 4 | 0.1124120 | -0.3158720 | 0.2237690 | -0.4167690 |
| | 5 | 0.3152930 | -0.4646330 | 0.4791440 | -0.4995650 |
| | 6 | 0.8802270 | -0.3246960 | 0.3737850 | -0.4838080 |
| | 7 | 0.0704578 | 0.2559170 | 0.2574940 | 0.4372540 |
| | 8 | 0.0009070 | 0.0301030 | 0.0004837 | 0.0219888 |
| | 9 | 0.0000118 | 0.0034404 | 0.0000028 | 0.0016857 |
| | 10 | 0.0000001 | 0.0003352 | 0.0000000 | 0.0001224 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 5.800 | 0 | 0.2734670 | 0.4457390 | 0.0209582 | 0.1432440 |
| | 1 | 0.0037010 | 0.0607229 | 0.2734670 | 0.4457390 |
| | 2 | 0.1354490 | 0.3422030 | 0.0009321 | -0.0305167 |
| | 3 | 0.0208224 | -0.1427890 | 0.0541427 | 0.2262990 |
| | 4 | 0.0898922 | -0.2860270 | 0.0912878 | -0.2880180 |
| | 5 | 0.2518620 | -0.4340820 | 0.4724620 | -0.4992410 |
| | 6 | 0.7449130 | -0.4359100 | 0.3541040 | -0.4782410 |
| | 7 | 0.1259540 | 0.3317980 | 0.7200110 | 0.4489930 |
| | 8 | 0.0015092 | 0.0388195 | 0.0009516 | 0.0308326 |
| | 9 | 0.0000204 | 0.0045158 | 0.0000055 | 0.0023447 |
| | 10 | 0.0000002 | 0.0004540 | 0.0000000 | 0.0001743 |
| 5.900 | 0 | 0.3166700 | 0.4651780 | 0.0321056 | 0.1762800 |
| | 1 | 0.0120777 | 0.1092330 | 0.3166700 | 0.4651780 |
| | 2 | 0.1560980 | 0.3629490 | 0.0010958 | 0.0330852 |
| | 3 | 0.0006580 | -0.0256440 | 0.0583955 | 0.2344900 |
| | 4 | 0.0697300 | -0.2546910 | 0.0106341 | -0.1025720 |
| | 5 | 0.1965770 | -0.3974100 | 0.4591750 | -0.4983310 |
| | 6 | 0.6181600 | -0.4858380 | 0.3433730 | -0.4748350 |
| | 7 | 0.2298110 | 0.4207110 | 0.9770600 | -0.1497110 |
| | 8 | 0.0025123 | 0.0500600 | 0.0019049 | 0.0436036 |
| | 9 | 0.0000348 | 0.0059011 | 0.0000106 | 0.0032513 |
| | 10 | 0.0000004 | 0.0006114 | 0.0000001 | 0.0002470 |
| 6.000 | 0 | 0.3440090 | 0.4750440 | 0.0543466 | 0.2267000 |
| | 1 | 0.0330338 | 0.1787250 | 0.3440090 | 0.4750440 |
| | 2 | 0.1698700 | 0.3755190 | 0.0154443 | 0.1233120 |
| | 3 | 0.0116362 | 0.1072420 | 0.0599547 | 0.2374030 |
| | 4 | 0.0511947 | -0.2203950 | 0.0078698 | 0.0883623 |
| | 5 | 0.1492570 | -0.3563420 | 0.4360750 | -0.4958970 |
| | 6 | 0.5101330 | -0.4998970 | 0.3381810 | -0.4730910 |
| | 7 | 0.4185820 | 0.4933270 | 0.6643810 | -0.4722060 |
| | 8 | 0.0041955 | 0.0646367 | 0.0039196 | 0.0624836 |
| | 9 | 0.0000590 | 0.0076809 | 0.0000202 | 0.0044977 |
| | 10 | 0.0000007 | 0.0008184 | 0.0000001 | 0.0003479 |
| 6.100 | 0 | 0.3591810 | 0.4797600 | 0.0966294 | 0.2954520 |
| | 1 | 0.0780695 | 0.2682810 | 0.3591810 | 0.4797600 |
| | 2 | 0.1786560 | 0.3830640 | 0.0597603 | 0.2370420 |
| | 3 | 0.0597600 | 0.2370420 | 0.0601778 | 0.2378160 |
| | 4 | 0.0339828 | -0.1811850 | 0.0597597 | 0.2370410 |
| | 5 | 0.1095790 | -0.3123640 | 0.3989880 | -0.4896900 |
| | 6 | 0.4196400 | -0.4935000 | 0.3362740 | -0.4724340 |
| | 7 | 0.7066030 | 0.4553190 | 0.4495290 | -0.4974460 |
| | 8 | 0.0070536 | 0.0836890 | 0.0084129 | 0.0913355 |
| | 9 | 0.0000993 | 0.0099629 | 0.0000386 | 0.0062137 |
| | 10 | 0.0000012 | 0.0010897 | 0.0000002 | 0.0004876 |
| | 11 | 0.0000000 | 0.0001007 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 6.200 | 0 | 0.3659860 | 0.4817050 | 0.1708110 | 0.3763440 |
| | 1 | 0.1601640 | 0.3667580 | 0.3659860 | 0.4817050 |
| | 2 | 0.1845710 | 0.3879490 | 0.1490460 | 0.3561340 |
| | 3 | 0.1371660 | 0.3440230 | 0.0603928 | 0.2382130 |
| | 4 | 0.0184694 | -0.1346410 | 0.1271940 | 0.3331900 |
| | 5 | 0.0770574 | -0.2666820 | 0.3428640 | -0.4746670 |
| | 6 | 0.3430390 | -0.4747240 | 0.3359620 | -0.4723260 |
| | 7 | 0.9609580 | 0.1936950 | 0.3432190 | -0.4747840 |
| | 8 | 0.0119921 | 0.1088500 | 0.0192785 | 0.1375020 |
| | 9 | 0.0001661 | 0.0128859 | 0.0000737 | 0.0085830 |
| | 10 | 0.0000021 | 0.0014432 | 0.0000005 | 0.0006802 |
| | 11 | 0.0000000 | 0.0001377 | 0. | 0. |
| 6.300 | 0 | 0.3678830 | 0.4822290 | 0.2850160 | 0.4514220 |
| | 1 | 0.2831130 | 0.4505110 | 0.3678830 | 0.4822290 |
| | 2 | 0.1897890 | 0.3921340 | 0.2811590 | 0.4495650 |
| | 3 | 0.2263750 | 0.4184840 | 0.0619496 | 0.2410640 |
| | 4 | 0.0061212 | -0.0779984 | 0.1865130 | 0.3895200 |
| | 5 | 0.0510788 | -0.2201580 | 0.2632500 | -0.4403970 |
| | 6 | 0.2770770 | -0.4475550 | 0.3357920 | -0.4722670 |
| | 7 | 0.9715300 | -0.1663110 | 0.2879490 | -0.4528070 |
| | 8 | 0.0207375 | 0.1425040 | 0.0489981 | 0.2158640 |
| | 9 | 0.0002766 | 0.0166293 | 0.0001409 | 0.0118711 |
| | 10 | 0.0000036 | 0.0019023 | 0.0000009 | 0.0009450 |
| | 11 | 0.0000000 | 0.0001871 | 0. | 0. |
| 6.400 | 0 | 0.3680180 | 0.4822660 | 0.4311930 | 0.4952430 |
| | 1 | 0.4301430 | 0.4950960 | 0.3680180 | 0.4822660 |
| | 2 | 0.1965820 | 0.3974130 | 0.4291140 | 0.4949500 |
| | 3 | 0.3109570 | 0.4628850 | 0.0664191 | 0.2490130 |
| | 4 | 0.0000735 | -0.0085741 | 0.2303970 | 0.4210870 |
| | 5 | 0.0309791 | -0.1732610 | 0.1617820 | -0.3682510 |
| | 6 | 0.2194880 | -0.4139000 | 0.3343350 | -0.4717570 |
| | 7 | 0.8055320 | -0.3957900 | 0.2575700 | -0.4372960 |
| | 8 | 0.0367512 | 0.1881500 | 0.1466830 | 0.3537900 |
| | 9 | 0.0004594 | 0.0214286 | 0.0002714 | 0.0164708 |
| | 10 | 0.0000062 | 0.0024959 | 0.0000017 | 0.0013080 |
| | 11 | 0.0000001 | 0.0002527 | 0.0000000 | 0.0001001 |
| 6.500 | 0 | 0.3694050 | 0.4826440 | 0.5816610 | 0.4932860 |
| | 1 | 0.5706510 | 0.4949830 | 0.3694050 | 0.4826440 |
| | 2 | 0.2074990 | 0.4055160 | 0.5602520 | 0.4963560 |
| | 3 | 0.3817930 | 0.4858260 | 0.0759803 | 0.2649670 |
| | 4 | 0.0056851 | 0.0751847 | 0.2594410 | 0.4383280 |
| | 5 | 0.0161485 | -0.1260460 | 0.0585803 | -0.2348380 |
| | 6 | 0.1689420 | -0.3747010 | 0.3300190 | -0.4702200 |
| | 7 | 0.6255800 | -0.4839730 | 0.2405590 | -0.4274230 |
| | 8 | 0.0673925 | 0.2507010 | 0.5210100 | -0.4995580 |
| | 9 | 0.0007622 | 0.0275969 | 0.0005284 | 0.0229808 |
| | 10 | 0.0000106 | 0.0032610 | 0.0000033 | 0.0018050 |
| | 11 | 0.0000001 | 0.0003395 | 0.0000000 | 0.0001409 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|------------|------------|-----------|------------|
| 6.600 | 0 | 0.3751790 | 0.4841690 | 0.7072870 | 0.4550080 |
| | 1 | 0.6820820 | 0.4656660 | 0.3751790 | 0.4841690 |
| | 2 | 0.2256690 | 0.4180220 | 0.6584270 | 0.4742370 |
| | 3 | 0.4365740 | 0.4959610 | 0.0940825 | 0.2919430 |
| | 4 | 0.0304431 | 0.1718030 | 0.2767020 | 0.4473680 |
| | 5 | 0.0061478 | -0.0781667 | 0.0012814 | -0.0357738 |
| | 6 | 0.1248290 | -0.3305250 | 0.3209690 | -0.4668490 |
| | 7 | 0.4847070 | -0.4997660 | 0.2312990 | -0.4216630 |
| | 8 | 0.1292260 | 0.3354500 | 0.9910540 | -0.0941606 |
| | 9 | 0.0012660 | 0.0355578 | 0.0010476 | 0.0323503 |
| | 10 | 0.0000180 | 0.0042446 | 0.0000062 | 0.0024850 |
| | 11 | 0.0000002 | 0.0004537 | 0.0000000 | 0.0001974 |
| 6.700 | 0 | 0.3888990 | 0.4875000 | 0.7963270 | 0.4027290 |
| | 1 | 0.7596460 | 0.4272990 | 0.3888990 | 0.4875000 |
| | 2 | 0.2551990 | 0.4359730 | 0.7243920 | 0.4468200 |
| | 3 | 0.4768150 | 0.4994620 | 0.1264300 | 0.3323330 |
| | 4 | 0.0820755 | 0.2744800 | 0.2855180 | 0.4516610 |
| | 5 | 0.0008366 | -0.0289121 | 0.0344474 | 0.1823750 |
| | 6 | 0.0876206 | -0.2818770 | 0.3048430 | -0.4603410 |
| | 7 | 0.3805600 | -0.4255250 | 0.2267190 | -0.4187090 |
| | 8 | 0.2600270 | 0.4386490 | 0.5785110 | -0.4937970 |
| | 9 | 0.0021109 | 0.0458916 | 0.0021354 | 0.0461609 |
| | 10 | 0.0000303 | 0.0055059 | 0.0000117 | 0.0034154 |
| | 11 | 0.0000004 | 0.0006033 | 0.0000001 | 0.0002752 |
| 6.800 | 0 | 0.4148810 | 0.4927020 | 0.8529800 | 0.3541250 |
| | 1 | 0.8093380 | 0.3928230 | 0.4148810 | 0.4927020 |
| | 2 | 0.3015220 | 0.4589190 | 0.7656480 | 0.4235930 |
| | 3 | 0.5054600 | 0.4999700 | 0.1819350 | 0.3857910 |
| | 4 | 0.1641810 | 0.3704400 | 0.2889050 | 0.4532540 |
| | 5 | 0.0005163 | 0.0227153 | 0.1433700 | 0.3504490 |
| | 6 | 0.0557057 | -0.2293520 | 0.2786940 | -0.4483570 |
| | 7 | 0.3019940 | -0.4591230 | 0.2249160 | -0.4175270 |
| | 8 | 0.5276430 | 0.4992350 | 0.3398610 | -0.4736620 |
| | 9 | 0.0035461 | 0.0594435 | 0.0045399 | 0.0672254 |
| | 10 | 0.0000507 | 0.0071211 | 0.0000220 | 0.0046909 |
| | 11 | 0.0000006 | 0.0007983 | 0.0000001 | 0.0003822 |
| 6.900 | 0 | 0.4584000 | 0.4982660 | 0.8866860 | 0.3169760 |
| | 1 | 0.8393730 | 0.3671870 | 0.4584000 | 0.4982660 |
| | 2 | 0.3711230 | 0.4831050 | 0.7897930 | 0.4074550 |
| | 3 | 0.5256880 | 0.4993400 | 0.2719160 | 0.4449470 |
| | 4 | 0.2715120 | 0.4447460 | 0.2895690 | 0.4535340 |
| | 5 | 0.00061010 | 0.0778704 | 0.2710980 | 0.4445260 |
| | 6 | 0.0311313 | -0.1736730 | 0.2390430 | -0.4264990 |
| | 7 | 0.2401930 | -0.4272060 | 0.2245410 | -0.4172790 |
| | 8 | 0.8984510 | 0.3020540 | 0.2414580 | -0.4279670 |
| | 9 | 0.0060287 | 0.0774105 | 0.0103038 | 0.1009830 |
| | 10 | 0.0000844 | 0.0091879 | 0.0000415 | 0.0064455 |
| | 11 | 0.0000011 | 0.0010516 | 0.0000003 | 0.0005287 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 7.000 | 0 | 0.5251710 | 0.4993660 | 0.9056700 | 0.2922880 |
| | 1 | 0.8564350 | 0.3506480 | 0.5251710 | 0.4993660 |
| | 2 | 0.4693060 | 0.4990570 | 0.8026280 | 0.3980160 |
| | 3 | 0.5465050 | 0.4983570 | 0.4035840 | 0.4906160 |
| | 4 | 0.3899780 | 0.4877450 | 0.2897470 | 0.4536450 |
| | 5 | 0.0193145 | 0.1376280 | 0.3782760 | 0.4849570 |
| | 6 | 0.0135581 | -0.1156470 | 0.1827670 | -0.3864760 |
| | 7 | 0.1894520 | -0.3918670 | 0.2244730 | -0.4172350 |
| | 8 | 0.9709730 | -0.1678840 | 0.1949240 | -0.3961420 |
| | 9 | 0.0104371 | 0.1016270 | 0.0259933 | 0.1591150 |
| | 10 | 0.0001400 | 0.0118332 | 0.0000787 | 0.0088722 |
| | 11 | 0.0000019 | 0.0013793 | 0.0000005 | 0.0007288 |
| 7.100 | 0 | 0.6187740 | 0.4856880 | 0.9155490 | 0.2780630 |
| | 1 | 0.8652280 | 0.3414790 | 0.6187740 | 0.4856880 |
| | 2 | 0.5944270 | 0.4910030 | 0.8083020 | 0.3936370 |
| | 3 | 0.5527030 | 0.4972150 | 0.5665040 | 0.4955570 |
| | 4 | 0.5031590 | 0.4999960 | 0.2920120 | 0.4546880 |
| | 5 | 0.0428681 | 0.2025600 | 0.4551990 | 0.4979890 |
| | 6 | 0.0031564 | -0.0560935 | 0.1105500 | -0.3135740 |
| | 7 | 0.1463450 | -0.3534520 | 0.2236450 | -0.4166870 |
| | 8 | 0.7316610 | -0.4430950 | 0.1705770 | -0.3761390 |
| | 9 | 0.0185579 | 0.1349570 | 0.0786198 | 0.2691440 |
| | 10 | 0.0002318 | 0.0152233 | 0.0001502 | 0.0122564 |
| | 11 | 0.0000032 | 0.0018020 | 0.0000010 | 0.0010017 |
| 7.200 | 0 | 0.7345560 | 0.4415690 | 0.9199240 | 0.2714110 |
| | 1 | 0.8690380 | 0.3373590 | 0.7345560 | 0.4415690 |
| | 2 | 0.7309740 | 0.4434540 | 0.8099140 | 0.3923680 |
| | 3 | 0.5649700 | 0.4957610 | 0.7271780 | 0.4454100 |
| | 4 | 0.5996940 | 0.4899600 | 0.2989220 | 0.4577850 |
| | 5 | 0.0804782 | 0.2720320 | 0.5019490 | 0.4999650 |
| | 6 | 0.0000181 | 0.0042578 | 0.0361358 | -0.1866280 |
| | 7 | 0.1089830 | -0.3116170 | 0.2209010 | -0.4148540 |
| | 8 | 0.5088340 | -0.4999220 | 0.1572700 | -0.3640550 |
| | 9 | 0.0343057 | 0.1820130 | 0.3217950 | 0.4671650 |
| | 10 | 0.0003835 | 0.0195796 | 0.0002902 | 0.0170321 |
| | 11 | 0.0000055 | 0.0023457 | 0.0000019 | 0.0013736 |
| 7.300 | 0 | 0.8530090 | 0.3540970 | 0.9212230 | 0.2693910 |
| | 1 | 0.8703540 | 0.3359140 | 0.8530090 | 0.3540970 |
| | 2 | 0.8519500 | 0.3551500 | 0.8100310 | 0.3922760 |
| | 3 | 0.5800360 | 0.4935530 | 0.8509200 | 0.3561670 |
| | 4 | 0.6756580 | 0.4681280 | 0.3136630 | 0.4639810 |
| | 5 | 0.1364220 | 0.3432360 | 0.5373180 | 0.4986050 |
| | 6 | 0.0042211 | 0.0648326 | 0.0000555 | 0.0074515 |
| | 7 | 0.0765308 | -0.2658460 | 0.2148890 | -0.4107450 |
| | 8 | 0.3640720 | -0.4811690 | 0.1500810 | -0.3571510 |
| | 9 | 0.0670923 | 0.2501820 | 0.9996510 | 0.0186752 |
| | 10 | 0.0006355 | 0.0252014 | 0.0005708 | 0.0238856 |
| | 11 | 0.0000093 | 0.0030431 | 0.0000035 | 0.0018800 |
| | 12 | 0.0000001 | 0.0003359 | 0.0000000 | 0.0001549 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 7.400 | 0 | 0.9447380 | 0.2284910 | 0.9213260 | 0.2692300 |
| | 1 | 0.8713180 | 0.3348470 | 0.9447380 | 0.2284910 |
| | 2 | 0.9359080 | 0.2449170 | 0.8110430 | 0.3914740 |
| | 3 | 0.6008070 | 0.4897530 | 0.9274300 | 0.2594290 |
| | 4 | 0.7324410 | 0.4426860 | 0.3404260 | 0.4738520 |
| | 5 | 0.2142040 | 0.4102690 | 0.5551950 | 0.4969440 |
| | 6 | 0.0159381 | 0.1252360 | 0.0587603 | 0.2351760 |
| | 7 | 0.0489124 | -0.2156850 | 0.2039570 | -0.4029370 |
| | 8 | 0.2710410 | -0.4444970 | 0.1464950 | -0.3536020 |
| | 9 | 0.1420520 | 0.3491030 | 0.4926380 | -0.4999460 |
| | 10 | 0.0010576 | 0.0325037 | 0.0011545 | 0.0339587 |
| | 11 | 0.0000155 | 0.0039363 | 0.0000066 | 0.0025706 |
| | 12 | 0.0000002 | 0.0004415 | 0.0000000 | 0.0002143 |
| 7.500 | 0 | 0.9915640 | 0.0914580 | 0.9219420 | 0.2682630 |
| | 1 | 0.8740040 | 0.3318440 | 0.9915640 | 0.0914580 |
| | 2 | 0.9805280 | 0.1381770 | 0.8153920 | 0.3879790 |
| | 3 | 0.6304190 | 0.4726910 | 0.9674530 | 0.1774480 |
| | 4 | 0.7737650 | 0.4184320 | 0.3848520 | 0.4865600 |
| | 5 | 0.5141920 | 0.4641930 | 0.5640770 | 0.4958770 |
| | 6 | 0.0355661 | 0.1852060 | 0.2167910 | 0.4120590 |
| | 7 | 0.0265972 | -0.1609030 | 0.1880730 | -0.3891660 |
| | 8 | 0.2074080 | -0.4054510 | 0.1450340 | -0.3521350 |
| | 9 | 0.3298920 | 0.4701740 | 0.2457250 | -0.4305160 |
| | 10 | 0.0017755 | 0.0420757 | 0.0024345 | 0.0492802 |
| | 11 | 0.0000258 | 0.0005789 | 0.0000123 | 0.0035140 |
| | 12 | 0.0000003 | 0.0005812 | 0.0000001 | 0.0002953 |
| 7.600 | 0 | 0.9991920 | -0.0284114 | 0.9247870 | 0.2637350 |
| | 1 | 0.8805310 | 0.3243400 | 0.4991920 | -0.0284114 |
| | 2 | 0.9973990 | 0.0509313 | 0.8256590 | 0.3794030 |
| | 3 | 0.6726560 | 0.4694640 | 0.9860400 | 0.1173250 |
| | 4 | 0.8034140 | 0.3974160 | 0.4539920 | 0.4978790 |
| | 5 | 0.4311430 | 0.4952380 | 0.5674020 | 0.4954360 |
| | 6 | 0.0638491 | 0.2444840 | 0.4627140 | 0.4904440 |
| | 7 | 0.0104297 | -0.1015920 | 0.1589050 | -0.3655880 |
| | 8 | 0.1605970 | -0.3671590 | 0.1446910 | -0.3517890 |
| | 9 | 0.7487320 | 0.4337420 | 0.1625490 | -0.3689540 |
| | 10 | 0.0030102 | 0.0547824 | 0.0054751 | 0.0737910 |
| | 11 | 0.0000428 | 0.0065397 | 0.0000231 | 0.0048079 |
| | 12 | 0.0000006 | 0.0007622 | 0.0000002 | 0.0004057 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|------------|------------|-----------|------------|
| 7.700 | 0 | 0.9898580 | -0.1180770 | 0.9315700 | 0.2524830 |
| | 1 | 0.8929870 | 0.3091300 | 0.9858580 | -0.1180770 |
| | 2 | 0.9998340 | -0.0128832 | 0.8444410 | 0.3624370 |
| | 3 | 0.7281760 | 0.4449000 | 0.9939630 | 0.0774602 |
| | 4 | 0.8250320 | 0.3799400 | 0.5542030 | 0.4970530 |
| | 5 | 0.5539350 | 0.4970830 | 0.5679620 | 0.4953600 |
| | 6 | 0.1019600 | 0.3025950 | 0.5536590 | 0.4971120 |
| | 7 | 0.0014639 | -0.0382329 | 0.1204110 | -0.3254410 |
| | 8 | 0.1238150 | -0.3293700 | 0.1446560 | -0.3517540 |
| | 9 | 0.9852430 | -0.1205790 | 0.1266750 | -0.3326080 |
| | 10 | 0.00052030 | 0.0719440 | 0.0136732 | 0.1161300 |
| | 11 | 0.0000707 | 0.0084082 | 0.0000435 | 0.0065929 |
| | 12 | 0.0000010 | 0.0009957 | 0.0000003 | 0.0005558 |
| | 13 | 0.0000000 | 0.0001045 | 0. | 0. |
| 7.800 | 0 | 0.9670220 | -0.1785780 | 0.9437030 | 0.2304950 |
| | 1 | 0.9130000 | 0.2818340 | 0.9670220 | -0.1785780 |
| | 2 | 0.9968480 | -0.0560518 | 0.8737610 | 0.3321180 |
| | 3 | 0.7985860 | 0.4010570 | 0.9971320 | 0.0534736 |
| | 4 | 0.8413750 | 0.3653260 | 0.6842360 | 0.4648190 |
| | 5 | 0.6690790 | 0.4705450 | 0.5682400 | 0.4953210 |
| | 6 | 0.1514810 | 0.3585170 | 0.6561520 | 0.4749910 |
| | 7 | 0.0008008 | 0.0282866 | 0.0710988 | -0.2569900 |
| | 8 | 0.0933829 | -0.2909680 | 0.1441710 | -0.3512630 |
| | 9 | 0.6621810 | -0.4729670 | 0.1087430 | -0.3113170 |
| | 10 | 0.0092383 | 0.0956713 | 0.0411040 | 0.1985310 |
| | 11 | 0.0001167 | 0.0108018 | 0.0000824 | 0.0090762 |
| | 12 | 0.0000017 | 0.0012963 | 0.0000006 | 0.0007595 |
| | 13 | 0.0000000 | 0.0001393 | 0. | 0. |
| 7.900 | 0 | 0.9507370 | -0.2164180 | 0.9614870 | 0.1924320 |
| | 1 | 0.9406120 | 0.2363490 | 0.9507370 | -0.2164180 |
| | 2 | 0.9930050 | -0.0833411 | 0.9134840 | 0.2811250 |
| | 3 | 0.8770890 | 0.3283350 | 0.9983290 | 0.0408455 |
| | 4 | 0.8547400 | 0.3523630 | 0.8242860 | 0.3805770 |
| | 5 | 0.7661180 | 0.4232980 | 0.5706860 | 0.4949780 |
| | 6 | 0.2142050 | 0.4102700 | 0.7205450 | 0.4487310 |
| | 7 | 0.0094422 | 0.0967112 | 0.0206273 | -0.1421330 |
| | 8 | 0.0673837 | -0.2506850 | 0.1424250 | -0.3494860 |
| | 9 | 0.3998210 | -0.4898610 | 0.0991696 | -0.2988900 |
| | 10 | 0.0170689 | 0.1295280 | 0.1781320 | 0.3826240 |
| | 11 | 0.0001926 | 0.0138763 | 0.0001581 | 0.0125727 |
| | 12 | 0.0000028 | 0.0016821 | 0.0000011 | 0.0010360 |
| | 13 | 0.0000000 | 0.0001848 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 8.000 | 0 | 0.9395810 | -0.2382610 | 0.9823900 | 0.1315310 |
| | 1 | 0.9719820 | 0.1650240 | 0.9395810 | -0.2382610 |
| | 2 | 0.9900270 | -0.0993657 | 0.9581430 | 0.2002630 |
| | 3 | 0.9486440 | 0.2207230 | 0.9987290 | 0.0156355 |
| | 4 | 0.8670610 | 0.3395080 | 0.9365070 | 0.2438480 |
| | 5 | 0.8407790 | 0.3658820 | 0.5779590 | 0.4938850 |
| | 6 | 0.2916070 | 0.4545020 | 0.7594740 | 0.4274030 |
| | 7 | 0.0281850 | 0.1655010 | 0.0013148 | 0.0362369 |
| | 8 | 0.0450031 | -0.2073110 | 0.1384830 | -0.3454060 |
| | 9 | 0.2614930 | -0.4394480 | 0.0940499 | -0.2918980 |
| | 10 | 0.0334793 | 0.1798850 | 0.9631070 | 0.1885000 |
| | 11 | 0.0003185 | 0.0178430 | 0.0003091 | 0.0175794 |
| | 12 | 0.0000047 | 0.0021763 | 0.0000020 | 0.0014113 |
| | 13 | 0.0000001 | 0.0002441 | 0.0000000 | 0.0001200 |
| 8.100 | 0 | 0.9333590 | -0.2494000 | 0.9983000 | 0.0411931 |
| | 1 | 0.9962160 | 0.0613962 | 0.9333590 | -0.2494000 |
| | 2 | 0.9881830 | -0.1080610 | 0.9930790 | 0.0829028 |
| | 3 | 0.9928090 | 0.0844957 | 0.9988110 | 0.0344677 |
| | 4 | 0.8600410 | 0.3249130 | 0.9925220 | 0.0861523 |
| | 5 | 0.8943130 | 0.3074370 | 0.5931580 | 0.4912450 |
| | 6 | 0.3839120 | 0.4863370 | 0.7821170 | 0.4128080 |
| | 7 | 0.0575731 | 0.2329340 | 0.0731185 | 0.2603310 |
| | 8 | 0.0262167 | -0.1597790 | 0.1312130 | -0.3376330 |
| | 9 | 0.1842790 | -0.3877110 | 0.0914952 | -0.2883120 |
| | 10 | 0.0719954 | 0.2584800 | 0.4043090 | -0.4907580 |
| | 11 | 0.0005290 | 0.0229936 | 0.0006215 | 0.0249212 |
| | 12 | 0.0000079 | 0.0028085 | 0.0000037 | 0.0019214 |
| | 13 | 0.0000001 | 0.0003212 | 0.0000000 | 0.0001648 |
| 8.200 | 0 | 0.9307750 | -0.2538360 | 0.9936240 | -0.0795951 |
| | 1 | 0.9947320 | -0.0723915 | 0.9307750 | -0.2538360 |
| | 2 | 0.9871150 | -0.1127770 | 0.9957780 | -0.0648415 |
| | 3 | 0.9965070 | -0.0590025 | 0.9988210 | 0.0343114 |
| | 4 | 0.8951800 | 0.3063210 | 0.9971220 | -0.0535656 |
| | 5 | 0.9308450 | 0.2537170 | 0.6200040 | 0.4853850 |
| | 6 | 0.4888580 | 0.4998760 | 0.7944100 | 0.4041320 |
| | 7 | 0.0979099 | 0.2971930 | 0.2658380 | 0.4417780 |
| | 8 | 0.0116374 | -0.1072470 | 0.1192570 | -0.3240910 |
| | 9 | 0.1360660 | -0.3428590 | 0.0904401 | -0.2868110 |
| | 10 | 0.1783150 | 0.3827780 | 0.1686740 | -0.3744630 |
| | 11 | 0.0008854 | 0.0297427 | 0.0013021 | 0.0360615 |
| | 12 | 0.0000131 | 0.0036165 | 0.0000068 | 0.0026166 |
| | 13 | 0.0000002 | 0.0004212 | 0.0000000 | 0.0002257 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 8.600 | 0 | 0.9246140 | -0.2640130 | 0.6365260 | -0.4810000 |
| | 1 | 0.6606640 | -0.4734840 | 0.9246140 | -0.2640130 |
| | 2 | 0.9763290 | -0.1520220 | 0.6828530 | -0.4653650 |
| | 3 | 0.8178660 | -0.3859550 | 0.9996270 | -0.0193129 |
| | 4 | 0.9848590 | 0.1221140 | 0.9044270 | -0.2940040 |
| | 5 | 0.9881310 | 0.1082960 | 0.9017620 | 0.2976360 |
| | 6 | 0.8867070 | 0.3169500 | 0.8027970 | 0.3978870 |
| | 7 | 0.3681940 | 0.4823140 | 0.8739680 | 0.3318850 |
| | 8 | 0.0246142 | 0.1549460 | 0.0105578 | -0.1022070 |
| | 9 | 0.0398474 | -0.1956010 | 0.0887423 | -0.2843710 |
| | 10 | 0.3015620 | -0.4589360 | 0.0604062 | -0.2382380 |
| | 11 | 0.0034292 | 0.0914231 | 0.0940738 | 0.2919310 |
| | 12 | 0.0000966 | 0.0098289 | 0.0000856 | 0.0092542 |
| | 13 | 0.0000014 | 0.0012033 | 0.0000006 | 0.0007759 |
| | 14 | 0.0000000 | 0.0001350 | 0. | 0. |
| 8.700 | 0 | 0.9150920 | -0.2787450 | 0.5459660 | -0.4978830 |
| | 1 | 0.5835220 | -0.4929750 | 0.9150920 | -0.2787450 |
| | 2 | 0.9653010 | -0.1830170 | 0.6181010 | -0.4858520 |
| | 3 | 0.7843590 | -0.4112660 | 0.9956500 | -0.0658078 |
| | 4 | 0.9992920 | 0.0265963 | 0.8941310 | -0.3076690 |
| | 5 | 0.9929380 | 0.0837390 | 0.9772950 | 0.1489620 |
| | 6 | 0.9422980 | 0.2331790 | 0.8051410 | 0.3960920 |
| | 7 | 0.4603410 | 0.4984250 | 0.9099980 | 0.2861850 |
| | 8 | 0.0551486 | 0.2282700 | 0.0031022 | 0.0556106 |
| | 9 | 0.0252460 | -0.1568720 | 0.0861761 | -0.2806240 |
| | 10 | 0.1789940 | -0.3833480 | 0.0570217 | -0.2318840 |
| | 11 | 0.0164668 | 0.1272620 | 0.8377050 | 0.3687210 |
| | 12 | 0.0001595 | 0.0126280 | 0.0001667 | 0.0129109 |
| | 13 | 0.0000024 | 0.0015533 | 0.0000011 | 0.0010528 |
| | 14 | 0.0000000 | 0.0001776 | 0. | 0. |
| 8.800 | 0 | 0.8967570 | -0.3042760 | 0.4812590 | -0.4996490 |
| | 1 | 0.5294030 | -0.4991350 | 0.8967570 | -0.3042760 |
| | 2 | 0.9443530 | -0.2292380 | 0.5742620 | -0.4944540 |
| | 3 | 0.7609910 | -0.4264780 | 0.9814750 | -0.1348390 |
| | 4 | 0.9916680 | -0.0908963 | 0.8891070 | -0.3140000 |
| | 5 | 0.9963770 | 0.0600789 | 0.9987980 | -0.0346455 |
| | 6 | 0.9767120 | 0.1508150 | 0.8114700 | 0.3911340 |
| | 7 | 0.5588380 | 0.4965260 | 0.9296970 | 0.2556560 |
| | 8 | 0.0998411 | 0.2997880 | 0.0772480 | 0.2669850 |
| | 9 | 0.0132434 | -0.1143150 | 0.0814138 | -0.2734700 |
| | 10 | 0.1195010 | -0.3243770 | 0.0553420 | -0.2286470 |
| | 11 | 0.0353497 | 0.1846620 | 0.3124390 | -0.4634880 |
| | 12 | 0.0002645 | 0.0162613 | 0.0003337 | 0.0182655 |
| | 13 | 0.0000040 | 0.0020007 | 0.0000020 | 0.0014284 |
| | 14 | 0.0000001 | 0.0002327 | 0.0000000 | 0.0001255 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 9.200 | 0 | 0.5951190 | -0.4908690 | 0.3957010 | -0.4890010 |
| | 1 | 0.4606420 | -0.4984490 | 0.5951190 | -0.4908690 |
| | 2 | 0.5969640 | -0.4905080 | 0.5250290 | -0.4993730 |
| | 3 | 0.7225850 | -0.4477230 | 0.5988670 | -0.4901280 |
| | 4 | 0.6647180 | -0.4720890 | 0.8841600 | -0.3200330 |
| | 5 | 0.9945910 | -0.0733491 | 0.7145440 | -0.4516310 |
| | 6 | 0.9917500 | -0.0904556 | 0.9189420 | 0.2729240 |
| | 7 | 0.9146310 | 0.2794290 | 0.9485930 | 0.2208270 |
| | 8 | 0.4127220 | 0.4923240 | 0.9094890 | 0.2869120 |
| | 9 | 0.0130863 | 0.1136440 | 0.0243501 | -0.1541340 |
| | 10 | 0.0333064 | -0.1794350 | 0.0542721 | -0.2265540 |
| | 11 | 0.5328350 | -0.4989210 | 0.0395910 | -0.1949960 |
| | 12 | 0.0022707 | 0.0475983 | 0.0112579 | 0.1055040 |
| | 13 | 0.0000295 | 0.0054275 | 0.0000243 | 0.0049276 |
| | 14 | 0.0000004 | 0.0006653 | 0.0000002 | 0.0004269 |
| 9.300 | 0 | 0.4436700 | -0.4968170 | 0.3945430 | -0.4887520 |
| | 1 | 0.4595620 | -0.4983620 | 0.4436700 | -0.4968170 |
| | 2 | 0.4459640 | -0.4970720 | 0.5249010 | -0.4993800 |
| | 3 | 0.7139640 | -0.4519060 | 0.4481820 | -0.4973080 |
| | 4 | 0.5724620 | -0.4947210 | 0.8772020 | -0.3282050 |
| | 5 | 0.9829140 | -0.1295910 | 0.6639010 | -0.4723730 |
| | 6 | 0.9831180 | -0.1288280 | 0.9653380 | 0.1829220 |
| | 7 | 0.9642950 | 0.1855530 | 0.9486400 | 0.2207300 |
| | 8 | 0.5132010 | 0.4998260 | 0.9633250 | 0.1879640 |
| | 9 | 0.0357877 | 0.1857600 | 0.0046469 | -0.0680097 |
| | 10 | 0.0225000 | -0.1483030 | 0.0535501 | -0.2251280 |
| | 11 | 0.2162330 | -0.4116750 | 0.0355829 | -0.1852630 |
| | 12 | 0.0041638 | 0.0643929 | 0.0494963 | 0.2169020 |
| | 13 | 0.0000484 | 0.0069601 | 0.0000462 | 0.0067975 |
| | 14 | 0.0000007 | 0.0008592 | 0.0000003 | 0.0005777 |
| 9.400 | 0 | 0.2954390 | -0.4562400 | 0.3943650 | -0.4887140 |
| | 1 | 0.4581730 | -0.4982470 | 0.2954390 | -0.4562400 |
| | 2 | 0.3118590 | -0.4632520 | 0.5231540 | -0.4994640 |
| | 3 | 0.7002400 | -0.4581530 | 0.3270940 | -0.4691520 |
| | 4 | 0.4996670 | -0.5000000 | 0.8630040 | -0.3438430 |
| | 5 | 0.9587020 | -0.1989780 | 0.6310230 | -0.4825280 |
| | 6 | 0.9731350 | -0.1616900 | 0.9976690 | 0.0482199 |
| | 7 | 0.9920310 | 0.0889102 | 0.9490340 | 0.2199280 |
| | 8 | 0.6150020 | 0.4865950 | 0.9856920 | 0.1187560 |
| | 9 | 0.0734708 | 0.2609020 | 0.0046528 | 0.0680528 |
| | 10 | 0.0134442 | -0.1151670 | 0.0518905 | -0.2218060 |
| | 11 | 0.1163060 | -0.3205920 | 0.0334959 | -0.1799280 |
| | 12 | 0.0080891 | 0.0895751 | 0.6423530 | 0.4793080 |
| | 13 | 0.0000799 | 0.0089366 | 0.0000897 | 0.0094696 |
| | 14 | 0.0000012 | 0.0011069 | 0.0000006 | 0.0007814 |
| | 15 | 0.0000000 | 0.0001286 | 0. | 0. |

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REFRACTIVE INDEX M= 1.600

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|---------|
| 9.800 | 0 | 0.0353760 | -0.1847280 | 0.3383260 | -0.4731400 | |
| | 1 | 0.3815530 | -0.4857680 | 0.0353760 | -0.1847280 | |
| | 2 | 0.0822929 | -0.2748100 | 0.4282400 | -0.4948240 | |
| | 3 | 0.5124380 | -0.4998450 | 0.1391880 | -0.3461430 | |
| | 4 | 0.3648690 | -0.4813930 | 0.6140330 | -0.4868230 | |
| | 5 | 0.6143030 | -0.4867590 | 0.5976390 | -0.4903740 | |
| | 6 | 0.9168040 | -0.2761780 | 0.6145800 | -0.4866940 | |
| | 7 | 0.9494700 | -0.2190360 | 0.9730310 | 0.1619940 | |
| | 8 | 0.9399810 | 0.2375220 | 0.9995130 | 0.0220562 | |
| | 9 | 0.4026590 | 0.4904330 | 0.8545650 | 0.3525390 | |
| | 10 | 0.0041787 | 0.0645080 | 0.0256709 | -0.1581510 | |
| | 11 | 0.0265555 | -0.1607860 | 0.0319382 | -0.1758360 | |
| | 12 | 0.7979860 | 0.4015020 | 0.0272997 | -0.1629550 | |
| | 13 | 0.0006410 | 0.0253103 | 0.0020316 | 0.0450270 | |
| | 14 | 0.0000090 | 0.0030018 | 0.0000070 | 0.0026448 | |
| | 15 | 0.0000001 | 0.0003679 | 0.0000001 | 0.0002351 | |
| 9.900 | 0 | 0.0235525 | -0.1516560 | 0.2920560 | -0.4547080 | |
| | 1 | 0.3248790 | -0.4683300 | 0.0235525 | -0.1516500 | |
| | 2 | 0.0691715 | -0.2537460 | 0.3807210 | -0.4802100 | |
| | 3 | 0.4098160 | -0.4918000 | 0.1299850 | -0.3362870 | |
| | 4 | 0.3523120 | -0.4776910 | 0.4694240 | -0.4990640 | |
| | 5 | 0.4830810 | -0.4997140 | 0.5973420 | -0.4904330 | |
| | 6 | 0.8929810 | -0.3091370 | 0.4950570 | -0.4999760 | |
| | 7 | 0.9217390 | -0.2685830 | 0.9867170 | 0.1144850 | |
| | 8 | 0.9796360 | 0.1412440 | 0.9996430 | 0.0189045 | |
| | 9 | 0.5177210 | 0.4996860 | 0.9675600 | 0.1771660 | |
| | 10 | 0.0162676 | 0.1265030 | 0.0128716 | -0.1127200 | |
| | 11 | 0.0186145 | -0.1351590 | 0.0318109 | -0.1754960 | |
| | 12 | 0.4632960 | -0.4986510 | 0.0226609 | -0.1488200 | |
| | 13 | 0.0011294 | 0.0335874 | 0.0059989 | 0.0772200 | |
| | 14 | 0.0000148 | 0.0038451 | 0.0000131 | 0.0036183 | |
| | 15 | 0.0000002 | 0.0004751 | 0.0000001 | 0.0003173 | |
| 10.000 | 0 | 0.0178285 | -0.1323280 | 0.2270370 | -0.4189170 | |
| | 1 | 0.2476880 | -0.4316690 | 0.0178285 | -0.1323280 | |
| | 2 | 0.0622887 | -0.2416790 | 0.2702680 | -0.4440980 | |
| | 3 | 0.2831010 | -0.4528790 | 0.1262020 | -0.3320770 | |
| | 4 | 0.3419760 | -0.4743720 | 0.3086060 | -0.4619180 | |
| | 5 | 0.3651390 | -0.4814690 | 0.5946830 | -0.4909530 | |
| | 6 | 0.8606660 | -0.3462940 | 0.4105170 | -0.4919280 | |
| | 7 | 0.8929800 | -0.3091380 | 0.9983540 | 0.0405393 | |
| | 8 | 0.9982630 | 0.0416374 | 0.9996660 | 0.0182832 | |
| | 9 | 0.6330320 | 0.4819780 | 0.9981650 | 0.0428023 | |
| | 10 | 0.0399270 | 0.1957880 | 0.0016190 | -0.0402044 | |
| | 11 | 0.0121124 | -0.1093880 | 0.0313422 | -0.1742410 | |
| | 12 | 0.1457040 | -0.3528100 | 0.0203074 | -0.1410500 | |
| | 13 | 0.0020648 | 0.0453929 | 0.0265528 | 0.1607720 | |
| | 14 | 0.0000243 | 0.0049282 | 0.0000249 | 0.0049858 | |
| | 15 | 0.0000004 | 0.0006125 | 0.0000002 | 0.0004282 | |

REFRACTIVE INDEX M= 1.600

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 10.400 | 0 | 0.0142435 | -0.1184930 | 0.0018039 | 0.0424337 |
| | 1 | 0.0014751 | 0.0383787 | 0.0142435 | -0.1184930 |
| | 2 | 0.0539248 | -0.2258690 | 0.0011875 | 0.0344397 |
| | 3 | 0.0006993 | -0.0264343 | 0.1193670 | -0.3242200 |
| | 4 | 0.2695940 | -0.4437490 | 0.0060565 | -0.0775876 |
| | 5 | 0.1234400 | -0.3289410 | 0.4915810 | -0.4999290 |
| | 6 | 0.5673840 | -0.4954390 | 0.2922180 | -0.4547820 |
| | 7 | 0.7766840 | -0.4164690 | 0.6717810 | -0.4695650 |
| | 8 | 0.9061380 | -0.2916370 | 1.0000000 | -0.0006557 |
| | 9 | 0.9605490 | 0.1946660 | 0.9761380 | -0.1526200 |
| | 10 | 0.3306930 | 0.4704630 | 0.6021900 | 0.4894460 |
| | 11 | 0.0005677 | 0.0238194 | 0.0203712 | -0.1412660 |
| | 12 | 0.0206272 | -0.1421330 | 0.0182119 | -0.1337170 |
| | 13 | 0.0719610 | 0.2584230 | 0.0209227 | -0.1431260 |
| | 14 | 0.0001845 | 0.0136571 | 0.0004441 | 0.0210692 |
| | 15 | 0.0000028 | 0.0016616 | 0.0000020 | 0.0014275 |
| | 16 | 0.0000000 | 0.0002033 | 0.0000000 | 0.0001295 |
| 10.500 | 0 | 0.0133147 | -0.1146190 | 0.0321527 | 0.1764060 |
| | 1 | 0.0276152 | 0.1638680 | 0.0133147 | -0.1146190 |
| | 2 | 0.0490678 | -0.2160100 | 0.0236050 | 0.1518150 |
| | 3 | 0.0034430 | 0.0585763 | 0.1094480 | -0.3122000 |
| | 4 | 0.2303770 | -0.4210740 | 0.0004421 | -0.0210217 |
| | 5 | 0.1020650 | -0.3027340 | 0.4188200 | -0.4933660 |
| | 6 | 0.4457310 | -0.4970460 | 0.2883040 | -0.4529730 |
| | 7 | 0.7439510 | -0.4364490 | 0.4794050 | -0.4995760 |
| | 8 | 0.8605200 | -0.3464460 | 0.9995170 | -0.0219629 |
| | 9 | 0.9909320 | 0.0947922 | 0.9726880 | -0.1629910 |
| | 10 | 0.4572360 | 0.4981680 | 0.8914840 | 0.3110310 |
| | 11 | 0.0051000 | 0.0712318 | 0.0139079 | -0.1171090 |
| | 12 | 0.0145871 | -0.1198930 | 0.0182056 | -0.1336940 |
| | 13 | 0.5341410 | 0.4980330 | 0.0151473 | -0.1221390 |
| | 14 | 0.0003204 | 0.0178955 | 0.0010940 | 0.0330583 |
| | 15 | 0.0000045 | 0.0021273 | 0.0000038 | 0.0019408 |
| | 16 | 0.0000001 | 0.0002627 | 0.0000000 | 0.0001744 |
| 10.600 | 0 | 0.0109493 | -0.1040640 | 0.0823366 | 0.2748770 |
| | 1 | 0.0695471 | 0.2543820 | 0.0109493 | -0.1040640 |
| | 2 | 0.0405776 | -0.1973090 | 0.0583851 | 0.2344700 |
| | 3 | 0.0142732 | 0.1186150 | 0.0923008 | -0.2894500 |
| | 4 | 0.1790240 | -0.3833720 | 0.0002271 | 0.0150691 |
| | 5 | 0.0875756 | -0.2826770 | 0.3189610 | -0.4660740 |
| | 6 | 0.3202480 | -0.4665720 | 0.2874960 | -0.4525950 |
| | 7 | 0.7067430 | -0.4552550 | 0.3216020 | -0.4670910 |
| | 8 | 0.8129130 | -0.3899820 | 0.9967190 | -0.0571890 |
| | 9 | 0.9999710 | -0.0053792 | 0.9710340 | -0.1677120 |
| | 10 | 0.5922370 | 0.4914190 | 0.9939490 | 0.0775538 |
| | 11 | 0.0163183 | 0.1266970 | 0.0062893 | -0.0790554 |
| | 12 | 0.0099521 | -0.0992627 | 0.0181182 | -0.1333790 |
| | 13 | 0.3803820 | -0.4854810 | 0.0125470 | -0.1113090 |
| | 14 | 0.0005639 | 0.0237401 | 0.0032512 | 0.0569266 |
| | 15 | 0.0000074 | 0.0027237 | 0.0000070 | 0.0026529 |
| | 16 | 0.0000001 | 0.0003388 | 0.0000001 | 0.0002349 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 11.000 | 0 | 0.0093472 | 0.0962282 | 0.2163680 | 0.4117680 |
| | 1 | 0.1758770 | 0.3807160 | 0.0093472 | 0.0962282 |
| | 2 | 0.0046529 | 0.0680531 | 0.1398970 | 0.3468800 |
| | 3 | 0.0445001 | 0.2062030 | 0.0013469 | 0.0366749 |
| | 4 | 0.0013370 | 0.0365408 | 0.0026116 | 0.0510371 |
| | 5 | 0.0541451 | -0.2263040 | 0.0013271 | 0.0364052 |
| | 6 | 0.0281026 | -0.1652660 | 0.2660990 | -0.4419160 |
| | 7 | 0.4661520 | -0.4988530 | 0.0916375 | -0.2885140 |
| | 8 | 0.6304600 | -0.4826800 | 0.7868290 | -0.4095470 |
| | 9 | 0.8714940 | -0.3346530 | 0.9692560 | -0.1726240 |
| | 10 | 0.9712200 | 0.1671890 | 0.9134600 | -0.2811600 |
| | 11 | 0.2182690 | 0.4130710 | 0.2180060 | 0.4128920 |
| | 12 | 0.0000091 | -0.0030163 | 0.0139279 | -0.1171920 |
| | 13 | 0.0160483 | -0.1256610 | 0.0101296 | -0.1001350 |
| | 14 | 0.0103165 | 0.1010450 | 0.0201460 | -0.1405000 |
| | 15 | 0.0000554 | 0.0074409 | 0.0001077 | 0.0103757 |
| | 16 | 0.0000008 | 0.0009204 | 0.0000006 | 0.0007738 |
| | 17 | 0.0000000 | 0.0001125 | 0. | 0. |
| 11.100 | 0 | 0.0438121 | 0.2046770 | 0.2245650 | 0.4172950 |
| | 1 | 0.1817430 | 0.3856330 | 0.0438121 | 0.2046770 |
| | 2 | 0.0397523 | 0.1953770 | 0.1433480 | 0.3504270 |
| | 3 | 0.0467637 | 0.2111320 | 0.0356285 | 0.1853620 |
| | 4 | 0.0316904 | 0.1751750 | 0.0026481 | 0.0513912 |
| | 5 | 0.0447787 | -0.2068180 | 0.0283087 | 0.1658530 |
| | 6 | 0.0102583 | -0.1007630 | 0.2426990 | -0.4287150 |
| | 7 | 0.3745800 | -0.4840140 | 0.0801818 | -0.2715740 |
| | 8 | 0.5872590 | -0.4923270 | 0.6020940 | -0.4894660 |
| | 9 | 0.8143490 | -0.3888240 | 0.9666170 | -0.1796340 |
| | 10 | 0.9967610 | 0.0568238 | 0.894740 | -0.3007000 |
| | 11 | 0.3346560 | 0.4718700 | 0.5687670 | 0.4952490 |
| | 12 | 0.0009385 | 0.0306201 | 0.0110202 | -0.1043970 |
| | 13 | 0.0110966 | -0.1047540 | 0.0101052 | -0.1000150 |
| | 14 | 0.0352213 | 0.1843390 | 0.0111812 | -0.1051480 |
| | 15 | 0.0000935 | 0.0096687 | 0.0002400 | 0.0154891 |
| | 16 | 0.0000014 | 0.0011780 | 0.0000011 | 0.0010469 |
| | 17 | 0.0000000 | 0.0001454 | 0. | 0. |

REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 11.800 | 0 | 0.7138580 | 0.4519570 | 0.2930550 | 0.4551630 |
| | 1 | 0.2617180 | 0.4395700 | 0.7138580 | 0.4519570 |
| | 2 | 0.6329500 | 0.4820000 | 0.2301050 | 0.4209000 |
| | 3 | 0.1751250 | 0.3800740 | 0.5550520 | 0.4969600 |
| | 4 | 0.3441980 | 0.4751060 | 0.1184830 | 0.3231790 |
| | 5 | 0.1147850 | 0.3187620 | 0.1771220 | 0.3817720 |
| | 6 | 0.0106346 | 0.1025740 | 0.1108300 | 0.3139210 |
| | 7 | 0.0132188 | 0.1142100 | 0.0606666 | -0.2387180 |
| | 8 | 0.1981310 | -0.3985920 | 0.0008993 | -0.0299745 |
| | 9 | 0.4100020 | -0.4918340 | 0.5401580 | -0.4983850 |
| | 10 | 0.7105430 | -0.4535100 | 0.8807790 | -0.3240490 |
| | 11 | 0.9943630 | -0.0748662 | 0.7913600 | -0.4063370 |
| | 12 | 0.3094110 | 0.4622510 | 0.5041630 | 0.4999830 |
| | 13 | 0.0010697 | 0.0326891 | 0.0057208 | -0.0754192 |
| | 14 | 0.0057308 | -0.0754851 | 0.0054651 | -0.0737238 |
| | 15 | 0.0177032 | 0.1318700 | 0.0057414 | -0.0755542 |
| | 16 | 0.0000470 | 0.0068524 | 0.0001305 | 0.0114247 |
| | 17 | 0.0000007 | 0.0008348 | 0.0000006 | 0.0007665 |
| | 18 | 0.0000000 | 0.0001037 | 0. | 0. |
| 12.000 | 0 | 0.7541360 | 0.4305980 | 0.4298690 | 0.4950570 |
| | 1 | 0.4131810 | 0.4924050 | 0.7541360 | 0.4305980 |
| | 2 | 0.6644580 | 0.4721800 | 0.3957750 | 0.4890160 |
| | 3 | 0.3811950 | 0.4856800 | 0.5729200 | 0.4946540 |
| | 4 | 0.3615340 | 0.4804450 | 0.3652980 | 0.4815140 |
| | 5 | 0.3361620 | 0.4730840 | 0.1781570 | 0.3826450 |
| | 6 | 0.0246500 | 0.1550560 | 0.3155090 | 0.4647180 |
| | 7 | 0.0566006 | 0.2310780 | 0.0325006 | -0.1773250 |
| | 8 | 0.0654668 | -0.2473480 | 0.0000031 | -0.0017532 |
| | 9 | 0.3109900 | -0.4628990 | 0.1345850 | -0.3412800 |
| | 10 | 0.5731120 | -0.4946260 | 0.8613580 | -0.3455720 |
| | 11 | 0.9221840 | -0.2678810 | 0.7713070 | -0.4199910 |
| | 12 | 0.6409770 | 0.4797140 | 0.9955450 | -0.0665956 |
| | 13 | 0.0113182 | 0.1057830 | 0.0010962 | -0.0330911 |
| | 14 | 0.0024879 | -0.0498169 | 0.0054184 | -0.0734100 |
| | 15 | 0.1748470 | -0.3798360 | 0.0035108 | -0.0591477 |
| | 16 | 0.0001424 | 0.0119322 | 0.0010134 | 0.0318177 |
| | 17 | 0.0000019 | 0.0013664 | 0.0000020 | 0.0014219 |
| | 18 | 0.0000000 | 0.0001717 | 0.0000000 | 0.0001275 |

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REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 12.200 | 0 | 0.7620660 | 0.4258190 | 0.6798920 | 0.4665180 |
| | 1 | 0.6788170 | 0.4669310 | 0.7620660 | 0.4258190 |
| | 2 | 0.6712440 | 0.4697610 | 0.6777240 | 0.4673480 |
| | 3 | 0.6734810 | 0.4689390 | 0.5742120 | 0.4944620 |
| | 4 | 0.3791500 | 0.4851750 | 0.6694390 | 0.4704150 |
| | 5 | 0.5422840 | 0.4982090 | 0.1920480 | 0.3939100 |
| | 6 | 0.0622070 | 0.2415310 | 0.4426730 | 0.4967030 |
| | 7 | 0.0985424 | 0.2980470 | 0.0004925 | -0.0221868 |
| | 8 | 0.0005339 | -0.0231008 | 0.0000072 | 0.0026744 |
| | 9 | 0.2132050 | -0.4095710 | 0.0005790 | -0.0240560 |
| | 10 | 0.4404790 | -0.4964450 | 0.8013390 | -0.3989920 |
| | 11 | 0.8061960 | -0.3952770 | 0.7673450 | -0.4225240 |
| | 12 | 0.9314790 | 0.2526380 | 0.8119040 | -0.3907890 |
| | 13 | 0.0480904 | 0.2139570 | 0.0050899 | 0.0711618 |
| | 14 | 0.0005585 | -0.0236270 | 0.0050301 | -0.0707444 |
| | 15 | 0.0117451 | -0.1077360 | 0.0029932 | -0.0546286 |
| | 16 | 0.0005038 | 0.0224401 | 0.3806160 | 0.4855380 |
| | 17 | 0.0000050 | 0.0022460 | 0.0000075 | 0.0027308 |
| | 18 | 0.0000001 | 0.0002825 | 0.0000001 | 0.0002293 |
| 12.400 | 0 | 0.7633840 | 0.4250040 | 0.9141660 | 0.2801190 |
| | 1 | 0.9109120 | 0.2848700 | 0.7633840 | 0.4250040 |
| | 2 | 0.6784710 | 0.4670630 | 0.9077070 | 0.2894390 |
| | 3 | 0.8744070 | 0.3313900 | 0.5840630 | 0.4928830 |
| | 4 | 0.4214210 | 0.4937870 | 0.8420370 | 0.3647060 |
| | 5 | 0.6599730 | 0.4737180 | 0.2450140 | 0.4300950 |
| | 6 | 0.1619230 | 0.3683800 | 0.4942840 | 0.4999670 |
| | 7 | 0.1326260 | 0.3391700 | 0.0716943 | 0.2579810 |
| | 8 | 0.0411444 | 0.1986240 | 0.0000247 | 0.0049703 |
| | 9 | 0.1156560 | -0.3198120 | 0.0240829 | 0.1533070 |
| | 10 | 0.3204360 | -0.4666440 | 0.6347190 | -0.4815090 |
| | 11 | 0.6725830 | -0.4692710 | 0.7666880 | -0.4229390 |
| | 12 | 0.9960170 | -0.0629891 | 0.6981500 | -0.4590600 |
| | 13 | 0.1554890 | 0.3623710 | 0.1275950 | 0.3336390 |
| | 14 | 0.0000994 | 0.0099703 | 0.0038556 | -0.0619739 |
| | 15 | 0.0042502 | -0.0650548 | 0.0028885 | -0.0536671 |
| | 16 | 0.0026427 | 0.0513396 | 0.0048934 | -0.0697818 |
| | 17 | 0.0000140 | 0.0037373 | 0.0000316 | 0.0056178 |
| | 18 | 0.0000002 | 0.0004626 | 0.0000002 | 0.0004148 |

REFRACTIVE INDEX M= 1.600

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 12.600 | 0 | 0.7801450 | 0.4141480 | 0.9952410 | 0.0688222 |
| | 1 | 0.9914810 | 0.0919051 | 0.7801450 | 0.4141480 |
| | 2 | 0.7105120 | 0.4535250 | 0.9868980 | 0.1137110 |
| | 3 | 0.9523500 | 0.2130250 | 0.6299050 | 0.4828300 |
| | 4 | 0.5202240 | 0.4995910 | 0.9060270 | 0.2917910 |
| | 5 | 0.7152440 | 0.4512980 | 0.3857200 | 0.4867650 |
| | 6 | 0.3706670 | 0.4829830 | 0.5068280 | 0.4999530 |
| | 7 | 0.1661080 | 0.3721780 | 0.3534310 | 0.4780350 |
| | 8 | 0.1416950 | 0.3487370 | 0.0006664 | 0.0258054 |
| | 9 | 0.0320560 | -0.1761490 | 0.0524165 | 0.2228650 |
| | 10 | 0.2157320 | -0.4113290 | 0.2759660 | -0.4470000 |
| | 11 | 0.5330730 | -0.4989050 | 0.7580030 | -0.4282930 |
| | 12 | 0.9065800 | -0.2910210 | 0.6533230 | -0.4759120 |
| | 13 | 0.4160630 | 0.4929040 | 0.8715050 | 0.3346400 |
| | 14 | 0.0034031 | 0.0582368 | 0.0015817 | -0.0397393 |
| | 15 | 0.0018844 | -0.0433683 | 0.0028808 | -0.0535955 |
| | 16 | 0.1023430 | 0.3030990 | 0.0021151 | -0.0459417 |
| | 17 | 0.0000407 | 0.0063821 | 0.0001829 | 0.0135235 |
| | 18 | 0.0000006 | 0.0007563 | 0.0000006 | 0.0007611 |
| 12.800 | 0 | 0.8353780 | 0.3708390 | 0.9975260 | -0.0496768 |
| | 1 | 0.9998390 | -0.0126711 | 0.8353780 | 0.3708390 |
| | 2 | 0.7931630 | 0.4050380 | 0.9994740 | 0.0229296 |
| | 3 | 0.9756530 | 0.1541230 | 0.7427880 | 0.4370970 |
| | 4 | 0.7035980 | 0.4566710 | 0.9246700 | 0.2639230 |
| | 5 | 0.7404040 | 0.4384130 | 0.6551170 | 0.4753300 |
| | 6 | 0.6391080 | 0.4802590 | 0.5077520 | 0.4999400 |
| | 7 | 0.2131810 | 0.4095540 | 0.6250420 | 0.4841120 |
| | 8 | 0.2415290 | 0.4280100 | 0.0087394 | 0.0930756 |
| | 9 | 0.0006457 | 0.0254025 | 0.0636879 | 0.2441960 |
| | 10 | 0.1263530 | -0.3322470 | 0.0060457 | -0.0775185 |
| | 11 | 0.3959280 | -0.4890490 | 0.7250180 | -0.4465050 |
| | 12 | 0.7722540 | -0.4193780 | 0.6396470 | -0.4801030 |
| | 13 | 0.8093290 | 0.3928300 | 0.8500750 | -0.3569980 |
| | 14 | 0.0176070 | 0.1315180 | 0.0001830 | 0.0135249 |
| | 15 | 0.0006019 | -0.0245259 | 0.0027727 | -0.0525834 |
| | 16 | 0.0137809 | -0.1165800 | 0.0016179 | -0.0401911 |
| | 17 | 0.0001322 | 0.0114982 | 0.0032795 | 0.0571728 |
| | 18 | 0.0000015 | 0.0012397 | 0.0000021 | 0.0014343 |
| | 19 | 0.0000000 | 0.0001564 | 0.0000000 | 0.0001251 |

Table 4

Real and Imaginary Parts of the Scattering Coefficients
A(N) and B(N) for the Isotropic, Dielectric, Infinite
Circular Cylinder. Refractive Index $m = 2.000$.
Range of Circumference to Wavelength Ratio, $x = \pi a/\lambda$;

| | | |
|-------|---------|--------|
| 0.100 | { 0.060 | 5.680 |
| 6.000 | { 0.200 | 8.000 |
| 8.200 | { 0.400 | 10.200 |

REFRACTIVE INDEX $n = 2.000$

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|-----------|-----------|------------|
| 0.100 | 0 | 0. | 0. | 0. | 0.0244656 |
| | 1 | 0. | 0. | 0. | 0. |
| 0.160 | 0 | 0.0000000 | 0.0001947 | 0.0042609 | 0.0651364 |
| | 1 | 0.0001486 | 0.0121896 | 0.0000000 | 0.0001947 |
| 0.220 | 0 | 0.0000005 | 0.0007020 | 0.0166648 | 0.1280120 |
| | 1 | 0.0005361 | 0.0231469 | 0.0000005 | 0.0007020 |
| | 2 | 0.0000000 | 0.0001376 | 0. | 0. |
| 0.280 | 0 | 0.0000035 | 0.0018639 | 0.0474229 | 0.2125420 |
| | 1 | 0.0014160 | 0.0376027 | 0.0000035 | 0.0018639 |
| | 2 | 0.0000001 | 0.0003604 | 0. | 0. |
| 0.340 | 0 | 0.0000169 | 0.0041159 | 0.1085290 | 0.3110470 |
| | 1 | 0.0030871 | 0.0554759 | 0.0000169 | 0.0041159 |
| | 2 | 0.0000006 | 0.0007819 | 0. | 0. |
| 0.400 | 0 | 0.0000647 | 0.0080424 | 0.2075870 | 0.4055790 |
| | 1 | 0.0059003 | 0.0765868 | 0.0000647 | 0.0080424 |
| | 2 | 0.0000022 | 0.0014946 | 0. | 0. |
| 0.460 | 0 | 0.0002079 | 0.0144166 | 0.3380160 | 0.4730340 |
| | 1 | 0.0102327 | 0.1006380 | 0.0002079 | 0.0144166 |
| | 2 | 0.0000068 | 0.0026080 | 0.0000060 | 0.0001181 |
| 0.520 | 0 | 0.0005888 | 0.0242585 | 0.4778760 | 0.4995100 |
| | 1 | 0.0164523 | 0.1272070 | 0.0005888 | 0.0242585 |
| | 2 | 0.0000180 | 0.0042484 | 0.0000001 | 0.00012477 |
| 0.580 | 0 | 0.0015169 | 0.0389174 | 0.6031560 | 0.4892430 |
| | 1 | 0.0248784 | 0.1557550 | 0.0015169 | 0.0389174 |
| | 2 | 0.0000430 | 0.0065590 | 0.0000002 | 0.0004801 |
| 0.640 | 0 | 0.0036349 | 0.0601804 | 0.7011100 | 0.4577710 |
| | 1 | 0.0357438 | 0.1856510 | 0.0036349 | 0.0601804 |
| | 2 | 0.0000941 | 0.0096994 | 0.0000008 | 0.0008735 |
| | 3 | 0.0000000 | 0.0001630 | 0. | 0. |
| 0.700 | 0 | 0.0082383 | 0.0903907 | 0.7711510 | 0.4200920 |
| | 1 | 0.0491685 | 0.2162200 | 0.0082383 | 0.0903907 |
| | 2 | 0.0001917 | 0.0138460 | 0.0000023 | 0.0015096 |
| | 3 | 0.0000001 | 0.0002773 | 0. | 0. |
| 0.760 | 0 | 0.0178760 | 0.1325010 | 0.8186420 | 0.3853150 |
| | 1 | 0.0651531 | 0.2467960 | 0.0178760 | 0.1325010 |
| | 2 | 0.0003684 | 0.0191909 | 0.0000063 | 0.0025008 |
| | 3 | 0.0000002 | 0.0004512 | 0. | 0. |
| 0.820 | 0 | 0.0374283 | 0.1898090 | 0.8498230 | 0.3572450 |
| | 1 | 0.0835957 | 0.2767810 | 0.0374283 | 0.1898090 |
| | 2 | 0.0006734 | 0.0259419 | 0.0000160 | 0.0039995 |
| | 3 | 0.0000005 | 0.0007068 | 0. | 0. |

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REFRACTIVE INDEX M= 2.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|---------|
| 0.880 | 0 | 0.0757986 | 0.2646760 | 0.8697640 | 0.3365620 | |
| | 1 | 0.1043330 | 0.3056920 | 0.0757987 | 0.2646760 | |
| | 2 | 0.0011793 | 0.0343211 | 0.0000386 | 0.0062103 | |
| | 3 | 0.0000011 | 0.0010718 | 0. | 0. | |
| 0.940 | 0 | 0.1475650 | 0.3546680 | 0.8820830 | 0.3225100 | |
| | 1 | 0.1271970 | 0.3331940 | 0.1475650 | 0.3546680 | |
| | 2 | 0.0019898 | 0.0445625 | 0.0000885 | 0.0094068 | |
| | 3 | 0.0000025 | 0.0015801 | 0.0000000 | 0.0001576 | |
| 1.000 | 0 | 0.2709110 | 0.4444300 | 0.8892540 | 0.3138170 | |
| | 1 | 0.1520880 | 0.3591070 | 0.2709110 | 0.4444300 | |
| | 2 | 0.0032492 | 0.0569087 | 0.0001948 | 0.0139559 | |
| | 3 | 0.0000052 | 0.0022727 | 0.0000001 | 0.0002595 | |
| 1.060 | 0 | 0.4532790 | 0.4978120 | 0.8929890 | 0.3091270 | |
| | 1 | 0.1790440 | 0.3833890 | 0.4532790 | 0.4978120 | |
| | 2 | 0.0051538 | 0.0716051 | 0.0004143 | 0.0203509 | |
| | 3 | 0.0000102 | 0.0031986 | 0.0000002 | 0.0004154 | |
| 1.120 | 0 | 0.6656240 | 0.4717720 | 0.8945390 | 0.3071470 | |
| | 1 | 0.2083140 | 0.4061030 | 0.6656240 | 0.4717720 | |
| | 2 | 0.0079650 | 0.0888906 | 0.0008569 | 0.0292609 | |
| | 3 | 0.0000195 | 0.0044155 | 0.0000004 | 0.0006487 | |
| | 4 | 0.0000000 | 0.0001150 | 0. | 0. | |
| 1.180 | 0 | 0.8458370 | 0.3611050 | 0.8948970 | 0.3066860 | |
| | 1 | 0.2404310 | 0.4273460 | 0.8458370 | 0.3611050 | |
| | 2 | 0.0120223 | 0.1089850 | 0.0017338 | 0.0416034 | |
| | 3 | 0.0000359 | 0.0059914 | 0.0000010 | 0.0009913 | |
| | 4 | 0.0000000 | 0.0001729 | 0. | 0. | |
| 1.240 | 0 | 0.9530010 | 0.2116370 | 0.8949380 | 0.3066330 | |
| | 1 | 0.2762920 | 0.4471630 | 0.9530010 | 0.2116370 | |
| | 2 | 0.0177582 | 0.1320710 | 0.0034519 | 0.0586511 | |
| | 3 | 0.0000641 | 0.0080051 | 0.0000022 | 0.0014857 | |
| | 4 | 0.0000001 | 0.0002545 | 0. | 0. | |
| 1.300 | 0 | 0.9946930 | 0.0726557 | 0.8955110 | 0.3058940 | |
| | 1 | 0.3172370 | 0.4654010 | 0.9946930 | 0.0726557 | |
| | 2 | 0.0257106 | 0.1582700 | 0.0068011 | 0.0821878 | |
| | 3 | 0.0001113 | 0.0105482 | 0.0000048 | 0.0021890 | |
| | 4 | 0.0000001 | 0.0003674 | 0. | 0. | |
| 1.360 | 0 | 0.9987710 | -0.0350379 | 0.8974860 | 0.3033230 | |
| | 1 | 0.3651450 | 0.4814710 | 0.9987710 | -0.0350379 | |
| | 2 | 0.0345325 | 0.1876110 | 0.0133384 | 0.1147190 | |
| | 3 | 0.0001884 | 0.0137260 | 0.0000101 | 0.0031766 | |
| | 4 | 0.0000003 | 0.0005214 | 0. | 0. | |

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REFRACTIVE INDEX M= 2.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 1.420 | 0 | 0.9874020 | -0.1115340 | 0.9017890 | 0.2975990 | |
| | 1 | 0.4224720 | 0.4939530 | 0.9874020 | -0.1115340 | |
| | 2 | 0.0509960 | 0.2199900 | 0.0261875 | 0.1596930 | |
| | 3 | 0.0003120 | 0.0176599 | 0.0000207 | 0.0045488 | |
| | 4 | 0.0000005 | 0.0007284 | 0.0000000 | 0.0001046 | |
| 1.480 | 0 | 0.9724490 | -0.1636830 | 0.9093770 | 0.2870720 | |
| | 1 | 0.4921390 | 0.4999380 | 0.9724490 | -0.1636830 | |
| | 2 | 0.0699875 | 0.2551260 | 0.0517164 | 0.2214540 | |
| | 3 | 0.0005060 | 0.0224889 | 0.0000414 | 0.0064383 | |
| | 4 | 0.0000010 | 0.0010028 | 0.0000000 | 0.0001584 | |
| 1.540 | 0 | 0.9589600 | -0.1983820 | 0.9211400 | 0.2695210 | |
| | 1 | 0.5769440 | 0.4940440 | 0.9589600 | -0.1983820 | |
| | 2 | 0.0944919 | 0.2925120 | 0.1028710 | 0.3037900 | |
| | 3 | 0.0008056 | 0.0283720 | 0.0000814 | 0.0090220 | |
| | 4 | 0.0000019 | 0.0013624 | 0.0000001 | 0.0002361 | |
| 1.600 | 0 | 0.9485570 | -0.2208990 | 0.9376220 | 0.2418410 | |
| | 1 | 0.6778760 | 0.4672900 | 0.9485570 | -0.2208990 | |
| | 2 | 0.1255640 | 0.3313580 | 0.2042670 | 0.4031650 | |
| | 3 | 0.0012612 | 0.0354913 | 0.0001572 | 0.0125363 | |
| | 4 | 0.0000033 | 0.0018283 | 0.0000001 | 0.0003469 | |
| 1.660 | 0 | 0.9413590 | -0.2349520 | 0.9583980 | 0.1996770 | |
| | 1 | 0.7904910 | 0.4069580 | 0.9413590 | -0.2349520 | |
| | 2 | 0.1642860 | 0.3705350 | 0.3910290 | 0.4879810 | |
| | 3 | 0.0019446 | 0.0440548 | 0.0002994 | 0.0173007 | |
| | 4 | 0.0000059 | 0.0024260 | 0.0000002 | 0.0005031 | |
| 1.720 | 0 | 0.9368970 | -0.2431480 | 0.9807850 | 0.1372790 | |
| | 1 | 0.8997430 | 0.3003430 | 0.9368970 | -0.2431480 | |
| | 2 | 0.2117110 | 0.4085210 | 0.6661010 | 0.4716040 | |
| | 3 | 0.0029572 | 0.0542996 | 0.0005645 | 0.0237522 | |
| | 4 | 0.0000101 | 0.0031856 | 0.0000005 | 0.0007208 | |
| | 5 | 0.0000000 | 0.0001187 | 0. | 0. | |
| 1.780 | 0 | 0.9345200 | -0.2473710 | 0.9976550 | 0.0483665 | |
| | 1 | 0.9783890 | 0.1454110 | 0.9345200 | -0.2473710 | |
| | 2 | 0.2687910 | 0.4433310 | 0.9146760 | 0.2793630 | |
| | 3 | 0.0044414 | 0.0664958 | 0.0010572 | 0.0324976 | |
| | 4 | 0.0000172 | 0.0041430 | 0.0000010 | 0.0010216 | |
| | 5 | 0.0000000 | 0.0001650 | 0. | 0. | |
| 1.840 | 0 | 0.9335530 | -0.2490610 | 0.9950350 | -0.0702898 | |
| | 1 | 0.9986050 | -0.0373228 | 0.9335530 | -0.2490610 | |
| | 2 | 0.3362800 | 0.4724360 | 0.9999740 | 0.0051364 | |
| | 3 | 0.0065964 | 0.0809499 | 0.0019749 | 0.0443959 | |
| | 4 | 0.0000285 | 0.0053401 | 0.0000020 | 0.0014335 | |
| | 5 | 0.0000000 | 0.0002268 | 0. | 0. | |

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REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 1.900 | 0 | 0.9333540 | -0.2494080 | 0.9531940 | -0.2112230 |
| | 1 | 0.9538090 | -0.2098970 | 0.9333540 | -0.2494080 |
| | 2 | 0.4145810 | 0.4926500 | 0.9544530 | -0.2085010 |
| | 3 | 0.0096994 | 0.0980069 | 0.0036969 | 0.0606899 |
| | 4 | 0.0000466 | 0.0068266 | 0.0000040 | 0.0019935 |
| | 5 | 0.0000001 | 0.0003084 | 0. | 0. |
| 1.960 | 0 | 0.9333130 | -0.2494800 | 0.8576540 | -0.3494050 |
| | 1 | 0.8650200 | -0.3417020 | 0.9333130 | -0.2494800 |
| | 2 | 0.5034900 | 0.4999880 | 0.8713680 | -0.3347920 |
| | 3 | 0.0141359 | 0.1180510 | 0.0069742 | 0.0832199 |
| | 4 | 0.0000750 | 0.0086605 | 0.0000076 | 0.0027501 |
| | 5 | 0.0000002 | 0.0004150 | 0. | 0. |
| 2.020 | 0 | 0.9328270 | -0.2503210 | 0.7167480 | -0.4505780 |
| | 1 | 0.7625210 | -0.4255380 | 0.9328270 | -0.2503210 |
| | 2 | 0.6017280 | 0.4895420 | 0.7960310 | -0.4029460 |
| | 3 | 0.0204405 | 0.1415010 | 0.0133509 | 0.1147720 |
| | 4 | 0.0001190 | 0.0109101 | 0.0000142 | 0.0037672 |
| | 5 | 0.0000003 | 0.0005533 | 0.0000000 | 0.0001148 |
| 2.080 | 0 | 0.9312500 | -0.2530280 | 0.5623950 | -0.4960920 |
| | 1 | 0.6675350 | -0.4710970 | 0.9312500 | -0.2530280 |
| | 2 | 0.7061520 | 0.4555230 | 0.7385860 | -0.4394050 |
| | 3 | 0.0293545 | 0.1687980 | 0.0261593 | 0.1596090 |
| | 4 | 0.0001865 | 0.0136551 | 0.0000263 | 0.0051288 |
| | 5 | 0.0000005 | 0.0007310 | 0.0000000 | 0.0001632 |
| 2.140 | 0 | 0.9278050 | -0.2588110 | 0.4264980 | -0.4945680 |
| | 1 | 0.5888540 | -0.4920420 | 0.9278050 | -0.2588110 |
| | 2 | 0.8105940 | 0.3918310 | 0.6976020 | -0.4592970 |
| | 3 | 0.0419042 | 0.2003700 | 0.0530021 | 0.2240380 |
| | 4 | 0.0002887 | 0.0169893 | 0.0000482 | 0.0069464 |
| | 5 | 0.0000009 | 0.0009577 | 0.0000001 | 0.0002298 |
| 2.200 | 0 | 0.9214440 | -0.2690450 | 0.3229740 | -0.4676130 |
| | 1 | 0.5274700 | -0.4992450 | 0.9214440 | -0.2690450 |
| | 2 | 0.9046280 | 0.2937270 | 0.6694450 | -0.4704130 |
| | 3 | 0.0595072 | 0.2365720 | 0.1121280 | 0.3155230 |
| | 4 | 0.0004422 | 0.0210230 | 0.0000878 | 0.0093695 |
| | 5 | 0.0000015 | 0.0012448 | 0.0000001 | 0.0003209 |
| 2.260 | 0 | 0.9106230 | -0.2852870 | 0.2504850 | -0.4332930 |
| | 1 | 0.4811460 | -0.4996440 | 0.9106230 | -0.2852870 |
| | 2 | 0.9733330 | 0.1611070 | 0.6507900 | -0.4767200 |
| | 3 | 0.0841112 | 0.2775540 | 0.2469420 | 0.4312330 |
| | 4 | 0.0006705 | 0.0250863 | 0.0001588 | 0.0125997 |
| | 5 | 0.0000026 | 0.0016060 | 0.0000002 | 0.0004444 |

REFRACTIVE INDEX M= 2.000

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 2.320 | 0 | 0.8929360 | -0.3091940 | 0.2019490 | -0.4014540 |
| | 1 | 0.4468880 | -0.4971710 | 0.8929360 | -0.3091940 |
| | 2 | 0.9999930 | 0.0026313 | 0.6390340 | -0.4802810 |
| | 3 | 0.1183600 | 0.3230340 | 0.5316840 | 0.4989950 |
| | 4 | 0.0010080 | 0.0317332 | 0.0002862 | 0.0169140 |
| | 5 | 0.0000042 | 0.0020575 | 0.0000004 | 0.0006109 |
| 2.380 | 0 | 0.8645540 | -0.3422000 | 0.1702690 | -0.3758690 |
| | 1 | 0.4219080 | -0.4938640 | 0.8645540 | -0.3422000 |
| | 2 | 0.9728680 | -0.1624680 | 0.6321920 | -0.4822090 |
| | 3 | 0.1657570 | 0.3718620 | 0.9031960 | 0.2956900 |
| | 4 | 0.0015036 | 0.0387473 | 0.0005155 | 0.0226986 |
| | 5 | 0.0000069 | 0.0026188 | 0.0000007 | 0.0008342 |
| 2.440 | 0 | 0.8194990 | -0.3846040 | 0.1500520 | -0.3571220 |
| | 1 | 0.4038810 | -0.4906740 | 0.8194990 | -0.3846040 |
| | 2 | 0.8929840 | -0.3091340 | 0.6287310 | -0.4831440 |
| | 3 | 0.2307090 | 0.4212860 | 0.9822820 | -0.1319240 |
| | 4 | 0.0022279 | 0.0471482 | 0.0004314 | 0.0305046 |
| | 5 | 0.0000110 | 0.0033128 | 0.0000013 | 0.0011323 |
| 2.500 | 0 | 0.7491970 | -0.4334750 | 0.1375770 | -0.3444560 |
| | 1 | 0.3909170 | -0.4879560 | 0.7491970 | -0.4334750 |
| | 2 | 0.7758730 | -0.4170060 | 0.6274150 | -0.4834930 |
| | 3 | 0.3181840 | 0.4657710 | 0.8114950 | -0.3911150 |
| | 4 | 0.0032827 | 0.0572010 | 0.0016953 | 0.0411395 |
| | 5 | 0.0000174 | 0.0041665 | 0.0000023 | 0.0015283 |
| 2.560 | 0 | 0.6438570 | -0.4788580 | 0.1303320 | -0.3366680 |
| | 1 | 0.3814660 | -0.4857470 | 0.6438570 | -0.4788580 |
| | 2 | 0.6442670 | -0.4787350 | 0.6271870 | -0.4835530 |
| | 3 | 0.4323560 | 0.4954030 | 0.6446920 | -0.4786070 |
| | 4 | 0.0048156 | 0.0692273 | 0.0031262 | 0.0558248 |
| | 5 | 0.0000272 | 0.0052123 | 0.0000042 | 0.0020527 |
| 2.620 | 0 | 0.4989800 | -0.4999990 | 0.1265780 | -0.3325000 |
| | 1 | 0.3742090 | -0.4839180 | 0.4989800 | -0.4999990 |
| | 2 | 0.5179420 | -0.4996780 | 0.6270830 | -0.4835800 |
| | 3 | 0.5732510 | 0.4946050 | 0.5330840 | -0.4989040 |
| | 4 | 0.0070421 | 0.0836211 | 0.0058838 | 0.0764800 |
| | 5 | 0.0000421 | 0.0064878 | 0.0000075 | 0.0027453 |
| 2.680 | 0 | 0.3280620 | -0.4695070 | 0.1250410 | -0.3307660 |
| | 1 | 0.3679580 | -0.4822500 | 0.3280620 | -0.4695070 |
| | 2 | 0.4083850 | -0.4915350 | 0.6261470 | -0.4838250 |
| | 3 | 0.7307840 | 0.4435520 | 0.4625020 | -0.4985920 |
| | 4 | 0.0102799 | 0.1008670 | 0.0114206 | 0.1062550 |
| | 5 | 0.0000746 | 0.0080382 | 0.0000134 | 0.0036585 |
| | 6 | 0.0000002 | 0.0004820 | 0.0000000 | 0.0001365 |

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REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 2.740 | 0 | 0.1682250 | -0.3740660 | 0.1247010 | -0.3303790 |
| | 1 | 0.3615810 | -0.4804580 | 0.1682250 | -0.3740660 |
| | 2 | 0.3193110 | -0.4662100 | 0.6233520 | -0.4845450 |
| | 3 | 0.8787860 | 0.3263760 | 0.4176650 | -0.4931740 |
| | 4 | 0.0150037 | 0.1215670 | 0.0232049 | 0.1505540 |
| | 5 | 0.0000983 | 0.0099165 | 0.0000236 | 0.0048617 |
| | 6 | 0.0000004 | 0.0006185 | 0.0000000 | 0.0001861 |
| 2.800 | 0 | 0.0581989 | -0.2341190 | 0.1246520 | -0.3303240 |
| | 1 | 0.3539170 | -0.4781840 | 0.0581989 | -0.2341190 |
| | 2 | 0.2496810 | -0.4328280 | 0.6175130 | -0.4859940 |
| | 3 | 0.9780170 | 0.1466280 | 0.3889450 | -0.4875110 |
| | 4 | 0.0219332 | 0.1464660 | 0.0504441 | 0.2188600 |
| | 5 | 0.0001485 | 0.0121861 | 0.0000416 | 0.0064478 |
| | 6 | 0.0000006 | 0.0007892 | 0.0000001 | 0.0002524 |
| 2.860 | 0 | 0.0080550 | -0.0893875 | 0.1240200 | -0.3296040 |
| | 1 | 0.3437200 | -0.4749490 | 0.0080550 | -0.0893875 |
| | 2 | 0.1964320 | -0.3972990 | 0.6071650 | -0.4883810 |
| | 3 | 0.9960110 | -0.0630329 | 0.3706230 | -0.4829720 |
| | 4 | 0.0321797 | 0.1764770 | 0.1208750 | 0.3259820 |
| | 5 | 0.0002227 | 0.0149225 | 0.0000730 | 0.0085423 |
| | 6 | 0.0000010 | 0.0010014 | 0.0000001 | 0.0003403 |
| 2.920 | 0 | 0.0010268 | 0.0320267 | 0.1218950 | -0.3271640 |
| | 1 | 0.3295850 | -0.4700630 | 0.0010268 | 0.0320267 |
| | 2 | 0.1561250 | -0.3629740 | 0.5904040 | -0.4917590 |
| | 3 | 0.9301790 | -0.2548450 | 0.3592110 | -0.4797690 |
| | 4 | 0.0474952 | 0.2126960 | 0.3244160 | 0.4681560 |
| | 5 | 0.0003319 | 0.0182162 | 0.0001281 | 0.0113176 |
| | 6 | 0.0000016 | 0.0012642 | 0.0000002 | 0.0004566 |
| 2.980 | 0 | 0.0152200 | 0.1224270 | 0.1173050 | -0.3217840 |
| | 1 | 0.3099060 | -0.4624550 | 0.0152200 | 0.1224270 |
| | 2 | 0.1256750 | -0.3314830 | 0.5646780 | -0.4957990 |
| | 3 | 0.8075930 | -0.3941910 | 0.3524740 | -0.4777410 |
| | 4 | 0.0707009 | 0.2563250 | 0.8083440 | 0.3936040 |
| | 5 | 0.0004920 | 0.0221766 | 0.0002255 | 0.0150150 |
| | 6 | 0.0000025 | 0.0015880 | 0.0000004 | 0.0006099 |
| 3.040 | 0 | 0.0357293 | 0.1856140 | 0.1092210 | -0.3119160 |
| | 1 | 0.2828730 | -0.4503950 | 0.0357293 | 0.1856140 |
| | 2 | 0.1025710 | -0.3033970 | 0.5265500 | -0.4992950 |
| | 3 | 0.6634360 | -0.4725340 | 0.3488900 | -0.4766190 |
| | 4 | 0.1064280 | 0.3083850 | 0.9454140 | -0.2271710 |
| | 5 | 0.0007261 | 0.0269365 | 0.0003993 | 0.0199794 |
| | 6 | 0.0000039 | 0.0019854 | 0.0000007 | 0.0008111 |
| | 7 | 0.0000000 | 0.0001118 | 0. | 0. |

REFRACTIVE INDEX M= 2.000

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 3.100 | 0 | 0.0551566 | 0.2282860 | 0.0966315 | -0.2954550 |
| | 1 | 0.2466180 | -0.4310430 | 0.0551566 | 0.2282860 |
| | 2 | 0.0848631 | -0.2786780 | 0.4715700 | -0.4991910 |
| | 3 | 0.5234790 | -0.4994480 | 0.3473420 | -0.4761260 |
| | 4 | 0.1623440 | 0.3687660 | 0.6151160 | -0.4865680 |
| | 5 | 0.0010678 | 0.0326600 | 0.0007145 | 0.0267197 |
| | 6 | 0.0000061 | 0.0024717 | 0.0000012 | 0.0010751 |
| 3.160 | 0 | 0.0707320 | 0.2563770 | 0.0787862 | -0.2694050 |
| | 1 | 0.1997230 | -0.3997920 | 0.0707320 | 0.2563770 |
| | 2 | 0.0710699 | -0.2569410 | 0.3947800 | -0.4888030 |
| | 3 | 0.4006270 | -0.4900250 | 0.3469400 | -0.4759960 |
| | 4 | 0.2508360 | 0.4334940 | 0.4076280 | -0.4913930 |
| | 5 | 0.0015667 | 0.0395500 | 0.0012985 | 0.0360116 |
| | 6 | 0.0000094 | 0.0030646 | 0.0000020 | 0.0014205 |
| 3.220 | 0 | 0.0819597 | 0.2743030 | 0.0557659 | -0.2294690 |
| | 1 | 0.1425110 | -0.3495740 | 0.0819597 | 0.2743030 |
| | 2 | 0.0600693 | -0.2376150 | 0.2932550 | -0.4552540 |
| | 3 | 0.2988050 | -0.4577340 | 0.3469100 | -0.4759870 |
| | 4 | 0.3895930 | 0.4876580 | 0.3035530 | -0.4597920 |
| | 5 | 0.0022961 | 0.0478624 | 0.0024159 | 0.0490920 |
| | 6 | 0.0000143 | 0.0037850 | 0.0000035 | 0.0018719 |
| 3.280 | 0 | 0.0893047 | 0.2851830 | 0.0297091 | -0.1697840 |
| | 1 | 0.0797414 | -0.2708920 | 0.0893047 | 0.2851830 |
| | 2 | 0.0510065 | -0.2200110 | 0.1731240 | -0.3783540 |
| | 3 | 0.2173540 | -0.4124460 | 0.3465100 | -0.4758580 |
| | 4 | 0.5929800 | 0.4912790 | 0.2477270 | -0.4316920 |
| | 5 | 0.0033665 | 0.0579241 | 0.0046518 | 0.0680451 |
| | 6 | 0.0000217 | 0.0046583 | 0.0000061 | 0.0024617 |
| 3.340 | 0 | 0.0935666 | 0.2912250 | 0.0070240 | -0.0835147 |
| | 1 | 0.0245439 | -0.1547300 | 0.0935666 | 0.2912250 |
| | 2 | 0.0432217 | -0.2033560 | 0.0606795 | -0.2387420 |
| | 3 | 0.1538110 | -0.3607670 | 0.3449710 | -0.4753590 |
| | 4 | 0.8336290 | 0.3724130 | 0.2155210 | -0.4111830 |
| | 5 | 0.0049469 | 0.0701603 | 0.0094268 | 0.0966332 |
| | 6 | 0.0000326 | 0.0057143 | 0.0000104 | 0.0032327 |
| 3.400 | 0 | 0.0956119 | 0.2940580 | 0.0011537 | 0.0339473 |
| | 1 | 0.0000011 | -0.0010616 | 0.0956119 | 0.2940580 |
| | 2 | 0.0362006 | -0.1867890 | 0.0018124 | -0.0425335 |
| | 3 | 0.1052840 | -0.3069190 | 0.3414340 | -0.4741910 |
| | 4 | 0.9908950 | 0.0949871 | 0.1960570 | -0.3970120 |
| | 5 | 0.0073011 | 0.0851339 | 0.0206621 | 0.1422500 |
| | 6 | 0.0000488 | 0.0069887 | 0.0000180 | 0.0042422 |
| | 7 | 0.0000002 | 0.0004816 | 0.0000000 | 0.0001816 |

REFRACTIVE INDEX M= 2.000

NOLTR 62-161

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 3.460 | 0 | 0.0962749 | 0.2949680 | 0.0325075 | 0.1773440 |
| | 1 | 0.0298976 | 0.1703050 | 0.0962749 | 0.2949680 |
| | 2 | 0.0295487 | -0.1693390 | 0.0271843 | 0.1626200 |
| | 3 | 0.0690310 | -0.2535070 | 0.3348820 | -0.4719490 |
| | 4 | 0.9480640 | -0.2218980 | 0.1840700 | -0.3875410 |
| | 5 | 0.0108521 | 0.1036070 | 0.0513808 | 0.2207730 |
| | 6 | 0.0000727 | 0.0085245 | 0.0000310 | 0.0055679 |
| 3.520 | 7 | 0.0000004 | 0.0006045 | 0.0000001 | 0.0002407 |
| | 0 | 0.0963387 | 0.2950550 | 0.1184870 | 0.3231840 |
| | 1 | 0.1181690 | 0.3228080 | 0.0963387 | 0.2950550 |
| | 2 | 0.0229917 | -0.1498770 | 0.1178570 | 0.3224390 |
| | 3 | 0.0426518 | -0.2020710 | 0.3240700 | -0.4680260 |
| | 4 | 0.7659270 | -0.4234180 | 0.1767530 | -0.3814600 |
| | 5 | 0.0163011 | 0.1266310 | 0.1578150 | 0.3645670 |
| 3.580 | 6 | 0.0001076 | 0.0103734 | 0.0000535 | 0.0073167 |
| | 7 | 0.0000006 | 0.0007556 | 0.0000001 | 0.0003179 |
| 3.640 | 0 | 0.0965549 | 0.2953510 | 0.2545250 | 0.4355940 |
| | 1 | 0.2407860 | 0.4275600 | 0.0965549 | 0.2953510 |
| | 2 | 0.0164128 | -0.1270570 | 0.2286990 | 0.4199950 |
| | 3 | 0.0241283 | -0.1534480 | 0.3074370 | -0.4614320 |
| | 4 | 0.5687140 | -0.4952560 | 0.1724740 | -0.3777910 |
| | 5 | 0.0248574 | 0.1556900 | 0.6166100 | 0.4862120 |
| | 6 | 0.0001587 | 0.0125983 | 0.0000929 | 0.0096384 |
| 3.700 | 7 | 0.0000009 | 0.0009408 | 0.0000002 | 0.0004185 |
| | 0 | 0.0976913 | 0.2968970 | 0.4096420 | 0.4917680 |
| | 1 | 0.3650100 | 0.4814330 | 0.0976913 | 0.2968970 |
| | 2 | 0.0099463 | -0.0992337 | 0.3281840 | 0.4695520 |
| | 3 | 0.0118035 | -0.1080010 | 0.2830360 | -0.4504740 |
| | 4 | 0.4098130 | -0.4917990 | 0.1701940 | -0.3758030 |
| | 5 | 0.0387119 | 0.1929080 | 0.8781390 | -0.3271250 |
| 3.760 | 6 | 0.0002334 | 0.0152759 | 0.0001625 | 0.0127483 |
| | 7 | 0.0000014 | 0.0011672 | 0.0000003 | 0.0005494 |
| 3.760 | 0 | 0.1006090 | 0.3008100 | 0.5495420 | 0.4975400 |
| | 1 | 0.4703250 | 0.4991190 | 0.1006090 | 0.3008100 |
| | 2 | 0.0041627 | -0.0643847 | 0.4057790 | 0.4910420 |
| | 3 | 0.0043451 | -0.0657737 | 0.2485480 | -0.4321710 |
| | 4 | 0.2924490 | -0.4548870 | 0.1691940 | -0.3749230 |
| | 5 | 0.0620721 | 0.2412860 | 0.3887950 | -0.4874770 |
| | 6 | 0.0003424 | 0.0185014 | 0.0002879 | 0.0169646 |
| 3.760 | 7 | 0.0000021 | 0.0014429 | 0.0000005 | 0.0007196 |
| | 8 | 0.0000000 | 0.0001152 | 0. | 0. |

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REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 3.820 | 0 | 0.1164920 | 0.3208140 | 0.7339050 | 0.4419150 |
| | 1 | 0.6097410 | 0.4878080 | 0.1164920 | 0.3208140 |
| | 2 | 0.0013325 | 0.0364785 | 0.5014980 | 0.4999980 |
| | 3 | 0.0000980 | 0.0099008 | 0.1414460 | -0.3484810 |
| | 4 | 0.1441700 | -0.3512620 | 0.1689010 | -0.3746640 |
| | 5 | 0.1821160 | 0.3859400 | 0.1465170 | -0.3536230 |
| | 6 | 0.0007351 | 0.0271036 | 0.0009599 | 0.0309680 |
| | 7 | 0.0000048 | 0.0021842 | 0.0000015 | 0.0012272 |
| 3.880 | 0 | 0.1331190 | 0.3397040 | 0.7852520 | 0.4106470 |
| | 1 | 0.6509630 | 0.4766660 | 0.1331190 | 0.3397040 |
| | 2 | 0.0117531 | 0.1077730 | 0.5279290 | 0.4992190 |
| | 3 | 0.0019520 | 0.0441378 | 0.0725081 | -0.2593270 |
| | 4 | 0.0975145 | -0.2966570 | 0.1686900 | -0.3744780 |
| | 5 | 0.3394040 | 0.4735070 | 0.1146740 | -0.3186280 |
| | 6 | 0.0010787 | 0.0328259 | 0.0018424 | 0.0428838 |
| | 7 | 0.0000072 | 0.0026757 | 0.0000026 | 0.0015998 |
| 3.940 | 0 | 0.1596010 | 0.3662350 | 0.8189080 | 0.3850940 |
| | 1 | 0.6792480 | 0.4667650 | 0.1596010 | 0.3662350 |
| | 2 | 0.0394530 | 0.1946700 | 0.5449300 | 0.4974770 |
| | 3 | 0.0059124 | 0.0766646 | 0.0137174 | -0.1163150 |
| | 4 | 0.0627609 | -0.2425320 | 0.1678260 | -0.3737120 |
| | 5 | 0.6407080 | 0.4797930 | 0.0974861 | -0.2966190 |
| | 6 | 0.0015879 | 0.0398168 | 0.0037358 | 0.0610067 |
| | 7 | 0.0000107 | 0.0032691 | 0.0000043 | 0.0020845 |
| 4.000 | 0 | 0.2010080 | 0.4007540 | 0.8404840 | 0.3661570 |
| | 1 | 0.6981660 | 0.4590530 | 0.2010080 | 0.4007540 |
| | 2 | 0.0951523 | 0.2934250 | 0.5551540 | 0.4969490 |
| | 3 | 0.0118233 | 0.1080900 | 0.0071066 | 0.0840004 |
| | 4 | 0.0372032 | -0.1892590 | 0.1657980 | -0.3718990 |
| | 5 | 0.9745050 | 0.1576230 | 0.0875050 | -0.2825740 |
| | 6 | 0.0023502 | 0.0484215 | 0.0082496 | 0.0904518 |
| | 7 | 0.0000159 | 0.0039847 | 0.0000074 | 0.0027167 |
| 4.060 | 0 | 0.2645890 | 0.4411140 | 0.8538800 | 0.3532260 |
| | 1 | 0.7104110 | 0.4535720 | 0.2645890 | 0.4411140 |
| | 2 | 0.1893800 | 0.3918110 | 0.5606420 | 0.4963090 |
| | 3 | 0.0197338 | 0.1390840 | 0.0993726 | 0.2991620 |
| | 4 | 0.0191152 | -0.1369300 | 0.1620130 | -0.3684630 |
| | 5 | 0.8716740 | -0.3344520 | 0.0815198 | -0.2736320 |
| | 6 | 0.0035072 | 0.0591179 | 0.0210216 | 0.1434560 |
| | 7 | 0.0000235 | 0.0048468 | 0.0000126 | 0.0035445 |
| | 8 | 0.0000001 | 0.0003579 | 0.0000000 | 0.0001622 |

REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 4.120 | 0 | 0.3589950 | 0.4797060 | 0.8617390 | 0.3451730 |
| | 1 | 0.7180160 | 0.4499660 | 0.3589950 | 0.4797060 |
| | 2 | 0.3244290 | 0.4681610 | 0.5630120 | 0.4960140 |
| | 3 | 0.0299202 | 0.1703670 | 0.2816130 | 0.4497850 |
| | 4 | 0.0073784 | -0.0855804 | 0.1557590 | -0.3626260 |
| | 5 | 0.5498020 | -0.4975140 | 0.0779413 | -0.2680790 |
| | 6 | 0.0052972 | 0.0725891 | 0.0702847 | 0.2556260 |
| | 7 | 0.0000346 | 0.0058847 | 0.0000215 | 0.0046344 |
| 4.180 | 8 | 0.0000002 | 0.0004442 | 0.0000000 | 0.0002119 |
| | 0 | 0.4898120 | 0.4998960 | 0.8658840 | 0.3407770 |
| | 1 | 0.7225710 | 0.4477300 | 0.4898120 | 0.4998960 |
| | 2 | 0.4856870 | 0.4997950 | 0.5636170 | 0.4959360 |
| | 3 | 0.0429292 | 0.2026980 | 0.4812090 | 0.4996470 |
| | 4 | 0.0012458 | -0.0352734 | 0.1461790 | -0.3532850 |
| | 5 | 0.3313080 | -0.4706840 | 0.0758893 | -0.2648210 |
| | 6 | 0.0081390 | 0.0898487 | 0.4132630 | 0.4924190 |
| 4.240 | 7 | 0.0000509 | 0.0071342 | 0.0000370 | 0.0060797 |
| | 8 | 0.0000003 | 0.0005496 | 0.0000001 | 0.0002762 |
| | 0 | 0.6493600 | 0.4771700 | 0.8676460 | 0.3388750 |
| | 1 | 0.7253920 | 0.4463160 | 0.6493600 | 0.4771700 |
| | 2 | 0.6445380 | 0.4786530 | 0.5636650 | 0.4959300 |
| | 3 | 0.0596506 | 0.2368380 | 0.6401020 | 0.4799700 |
| | 4 | 0.0001929 | 0.0138875 | 0.1322630 | -0.3387760 |
| | 5 | 0.2076590 | -0.4056310 | 0.0748239 | -0.2631070 |
| 4.300 | 6 | 0.0128134 | 0.1124690 | 0.6862730 | -0.4640070 |
| | 7 | 0.0000746 | 0.0086393 | 0.0000642 | 0.0080153 |
| | 8 | 0.0000005 | 0.0006780 | 0.0000001 | 0.0003593 |
| | 0 | 0.8080810 | 0.3938100 | 0.8680830 | 0.3384010 |
| | 1 | 0.7276500 | 0.4451690 | 0.8080810 | 0.3938100 |
| | 2 | 0.7752250 | 0.4174340 | 0.5643230 | 0.4958450 |
| | 3 | 0.0814250 | 0.2734870 | 0.7476920 | 0.4343370 |
| | 4 | 0.0038299 | 0.0617678 | 0.1129130 | -0.3164860 |
| 4.360 | 5 | 0.1349080 | -0.3416250 | 0.0743771 | -0.2623840 |
| | 6 | 0.0208894 | 0.1430140 | 0.1857670 | -0.3889180 |
| | 7 | 0.0001093 | 0.0104543 | 0.0001133 | 0.0106423 |
| | 8 | 0.0000007 | 0.0008339 | 0.0000002 | 0.0004666 |
| | 0 | 0.9269320 | 0.2602490 | 0.8681210 | 0.3383590 |
| | 1 | 0.7304670 | 0.4437170 | 0.9269320 | 0.2602490 |
| | 2 | 0.8679690 | 0.3385240 | 0.5668020 | 0.4955170 |
| | 3 | 0.1101870 | 0.3131220 | 0.8158780 | 0.3875840 |
| 4.420 | 4 | 0.0118525 | 0.1082220 | 0.0872408 | -0.2821880 |
| | 5 | 0.0889404 | -0.2846580 | 0.0742687 | -0.2622080 |
| | 6 | 0.0358466 | 0.1859070 | 0.0910068 | -0.2876190 |
| | 7 | 0.0001600 | 0.0126477 | 0.0002037 | 0.0142714 |
| | 8 | 0.0000010 | 0.0010230 | 0.0000004 | 0.0006052 |

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REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 4.420 | 0 | 0.9872580 | 0.1121570 | 0.8686510 | 0.3377820 |
| | 1 | 0.7349970 | 0.4413350 | 0.9872580 | 0.1121570 |
| | 2 | 0.9269610 | 0.2602000 | 0.5724470 | 0.4947240 |
| | 3 | 0.1486210 | 0.3557140 | 0.8582960 | 0.3487470 |
| | 4 | 0.0240215 | 0.1531160 | 0.0555049 | -0.2289630 |
| | 5 | 0.0580354 | -0.2338100 | 0.0742586 | -0.2621910 |
| | 6 | 0.0664811 | 0.2491210 | 0.0601031 | -0.2376780 |
| | 7 | 0.0002343 | 0.0153065 | 0.0003768 | 0.0194082 |
| | 8 | 0.0000016 | 0.0012518 | 0.0000006 | 0.0007845 |
| 4.480 | 0 | 0.9996730 | -0.0180853 | 0.8705900 | 0.3356540 |
| | 1 | 0.7424900 | 0.4372630 | 0.9996730 | -0.0180853 |
| | 2 | 0.9616780 | 0.1919740 | 0.5828360 | 0.4930910 |
| | 3 | 0.2002530 | 0.4001890 | 0.8846480 | 0.3194460 |
| | 4 | 0.0401627 | 0.1963410 | 0.0217578 | -0.1458920 |
| | 5 | 0.0363652 | -0.1871970 | 0.0741176 | -0.2619620 |
| | 6 | 0.1392030 | 0.3461580 | 0.0463305 | -0.2102000 |
| | 7 | 0.0003440 | 0.0185433 | 0.0007257 | 0.0269295 |
| | 8 | 0.0000023 | 0.0015283 | 0.0000010 | 0.0010166 |
| 4.540 | 9 | 0.0000000 | 0.0001092 | 0. | 0. |
| | 0 | 0.9859550 | -0.1176770 | 0.8749210 | 0.3308080 |
| | 1 | 0.7543400 | 0.4304780 | 0.9859550 | -0.1176770 |
| | 2 | 0.9809570 | 0.1366760 | 0.5998820 | 0.4899220 |
| | 3 | 0.2692560 | 0.4435730 | 0.9009880 | 0.2986780 |
| | 4 | 0.0601806 | 0.2378210 | 0.0003366 | -0.0183438 |
| | 5 | 0.0209331 | -0.1431600 | 0.0736059 | -0.2611280 |
| | 6 | 0.3434790 | 0.4764890 | 0.0391225 | -0.1938870 |
| | 7 | 0.0005068 | 0.0225069 | 0.0014839 | 0.0384935 |
| 4.600 | 8 | 0.0000035 | 0.0018620 | 0.0000017 | 0.0013179 |
| | 9 | 0.0000000 | 0.0001361 | 0. | 0. |
| 4.660 | 0 | 0.9632360 | -0.1881850 | 0.8826970 | 0.3217810 |
| | 1 | 0.7720990 | 0.4194780 | 0.9632360 | -0.1881830 |
| | 2 | 0.9911420 | 0.0936974 | 0.6259310 | 0.4838810 |
| | 3 | 0.3595470 | 0.4798680 | 0.9109690 | 0.2847890 |
| | 4 | 0.0840828 | 0.2775120 | 0.0270440 | 0.1622120 |
| | 5 | 0.0101900 | -0.1004300 | 0.0724566 | -0.2592420 |
| | 6 | 0.8877890 | 0.3156266 | 0.0350215 | -0.1838340 |
| | 7 | 0.0007513 | 0.0273991 | 0.0033338 | 0.0576424 |
| | 8 | 0.0000051 | 0.0022641 | 0.0000029 | 0.0017101 |
| | 9 | 0.0000000 | 0.0001690 | 0. | 0. |

REFRACTIVE INDEX M= 2.000

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 4.720 | 0 | 0.9222480 | -0.2677810 | 0.9126310 | 0.2823750 |
| | 1 | 0.8316290 | 0.3741960 | 0.9222480 | -0.2677810 |
| | 2 | 0.9986360 | 0.0369092 | 0.7161360 | 0.4508720 |
| | 3 | 0.6037920 | 0.4891090 | 0.9199780 | 0.2713280 |
| | 4 | 0.1442680 | 0.3513610 | 0.4051430 | 0.4909200 |
| | 5 | 0.0002391 | -0.0154622 | 0.0669556 | -0.2499450 |
| | 6 | 0.3154490 | -0.4646940 | 0.0311910 | -0.1738340 |
| | 7 | 0.0017018 | 0.0412184 | 0.0325149 | 0.1773630 |
| | 8 | 0.0000111 | 0.0033318 | 0.0000024 | 0.0028988 |
| | 9 | 0.0000001 | 0.0002583 | 0.0000000 | 0.0001372 |
| 4.780 | 0 | 0.9085950 | -0.2881850 | 0.9358290 | 0.2450580 |
| | 1 | 0.8750900 | 0.3306170 | 0.9085950 | -0.2881850 |
| | 2 | 0.9996390 | 0.0190082 | 0.7846310 | 0.4110780 |
| | 3 | 0.7395970 | 0.4388540 | 0.9214000 | 0.2691130 |
| | 4 | 0.1813660 | 0.3853210 | 0.6702410 | 0.4701260 |
| | 5 | 0.0007757 | 0.0278400 | 0.0618191 | -0.2408270 |
| | 6 | 0.1524380 | -0.3594450 | 0.0304033 | -0.1716940 |
| | 7 | 0.0026245 | 0.0511629 | 0.3068650 | 0.4611930 |
| | 8 | 0.0000163 | 0.0040345 | 0.0000144 | 0.0037956 |
| | 9 | 0.0000001 | 0.0003181 | 0.0000000 | 0.0001776 |
| 4.840 | 0 | 0.8994140 | -0.3007800 | 0.9629340 | 0.1889220 |
| | 1 | 0.9250970 | 0.2632350 | 0.8994140 | -0.3007800 |
| | 2 | 0.9999670 | 0.0057328 | 0.8660360 | 0.3406140 |
| | 3 | 0.8595190 | 0.3474850 | 0.9218210 | 0.2684530 |
| | 4 | 0.2240400 | 0.4169480 | 0.8517730 | 0.3553250 |
| | 5 | 0.0052173 | 0.0720424 | 0.0544863 | -0.2269750 |
| | 6 | 0.0850741 | -0.2789920 | 0.0300146 | -0.1706270 |
| | 7 | 0.0041524 | 0.0643056 | 0.3042670 | -0.4600960 |
| | 8 | 0.0000238 | 0.0048817 | 0.0000250 | 0.0049992 |
| | 9 | 0.0000001 | 0.0003907 | 0.0000001 | 0.0002294 |
| 4.900 | 0 | 0.8938680 | -0.3080070 | 0.9884150 | 0.1070060 |
| | 1 | 0.9726730 | 0.1630360 | 0.8938680 | -0.3080070 |
| | 2 | 0.9999810 | -0.0044038 | 0.9462870 | 0.2254510 |
| | 3 | 0.9452390 | 0.2275130 | 0.9218530 | 0.2684020 |
| | 4 | 0.2732670 | 0.4456370 | 0.9442550 | 0.2294290 |
| | 5 | 0.0139239 | 0.1171750 | 0.0445220 | -0.2062520 |
| | 6 | 0.0513261 | -0.2206620 | 0.0298684 | -0.1702240 |
| | 7 | 0.0068185 | 0.0822922 | 0.0649110 | -0.2463690 |
| | 8 | 0.0000349 | 0.0059047 | 0.0000441 | 0.0066387 |
| | 9 | 0.0000002 | 0.0004788 | 0.0000001 | 0.0002962 |
| 4.960 | 0 | 0.8910100 | -0.3116270 | 0.9999610 | -0.0062565 |
| | 1 | 0.9993470 | 0.0255523 | 0.8910100 | -0.3116270 |
| | 2 | 0.9998380 | -0.0127261 | 0.9961970 | 0.0615479 |
| | 3 | 0.9900140 | 0.0994274 | 0.9220710 | 0.2680590 |
| | 4 | 0.3302360 | 0.4702980 | 0.9833070 | 0.1281180 |
| | 5 | 0.0273457 | 0.1630890 | 0.0317509 | -0.1753360 |
| | 6 | 0.0318281 | -0.1755420 | 0.0298432 | -0.1701540 |
| | 7 | 0.0118378 | 0.1081560 | 0.0319101 | -0.1757610 |
| | 8 | 0.0000510 | 0.0071426 | 0.0000795 | 0.0089157 |
| | 9 | 0.0000003 | 0.0005854 | 0.0000001 | 0.0003822 |

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REFRACTIVE INDEX M= 2.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 5.020 | 0 | 0.8899190 | -0.3129900 | 0.9776070 | -0.1479590 | |
| | 1 | 0.9804540 | -0.1384340 | 0.8899190 | -0.3129900 | |
| | 2 | 0.9995810 | -0.0204680 | 0.9833140 | -0.1280920 | |
| | 3 | 0.9996480 | -0.0187545 | 0.9230590 | 0.2664980 | |
| | 4 | 0.3962270 | 0.4891130 | 0.9969650 | 0.0550112 | |
| | 5 | 0.0459868 | 0.2094560 | 0.0169119 | -0.1289410 | |
| | 6 | 0.0194248 | -0.1380120 | 0.0298319 | -0.1701230 | |
| | 7 | 0.0224467 | 0.1481310 | 0.0213145 | -0.1444310 | |
| | 8 | 0.0000748 | 0.0086459 | 0.0001480 | 0.0121644 | |
| | 9 | 0.0000005 | 0.0007143 | 0.0000002 | 0.0004932 | |
| 5.080 | 0 | 0.8897350 | -0.3132200 | 0.9018690 | -0.2974910 | |
| | 1 | 0.9019320 | -0.2974060 | 0.8897350 | -0.3132200 | |
| | 2 | 0.9991670 | -0.0288476 | 0.9019960 | -0.2973210 | |
| | 3 | 0.9860000 | -0.1174920 | 0.9254390 | 0.2626810 | |
| | 4 | 0.4723270 | 0.4992340 | 0.9999800 | 0.0044505 | |
| | 5 | 0.0703725 | 0.2557740 | 0.0034548 | -0.0586758 | |
| | 6 | 0.0110874 | -0.1047110 | 0.0297296 | -0.1698400 | |
| | 7 | 0.0495340 | 0.2169800 | 0.0165881 | -0.1277220 | |
| | 8 | 0.0001098 | 0.0104797 | 0.0002883 | 0.0169763 | |
| | 9 | 0.0000008 | 0.0008698 | 0.0000004 | 0.0006365 | |
| 5.140 | 0 | 0.8896410 | -0.3133360 | 0.7727090 | -0.4190820 | |
| | 1 | 0.7779660 | -0.4156140 | 0.8896410 | -0.3133360 | |
| | 2 | 0.9984660 | -0.0391406 | 0.7828810 | -0.4122840 | |
| | 3 | 0.9604150 | -0.1949830 | 0.9298800 | 0.2553490 | |
| | 4 | 0.5588630 | 0.4965230 | 0.9991150 | -0.0297321 | |
| | 5 | 0.1010210 | 0.3013560 | 0.0022807 | 0.0477024 | |
| | 6 | 0.0054365 | -0.0735319 | 0.0294241 | -0.1689920 | |
| | 7 | 0.1466220 | 0.3537290 | 0.0141161 | -0.1179700 | |
| | 8 | 0.0001621 | 0.0127306 | 0.0006009 | 0.0245064 | |
| | 9 | 0.0000011 | 0.0010575 | 0.0000007 | 0.0008224 | |
| 5.200 | 0 | 0.8888240 | -0.3143500 | 0.6182430 | -0.4858170 | |
| | 1 | 0.6423980 | -0.4792940 | 0.8888240 | -0.3143500 | |
| | 2 | 0.9972090 | -0.0527580 | 0.6637830 | -0.4724140 | |
| | 3 | 0.9308690 | -0.2536760 | 0.9370610 | 0.2428540 | |
| | 4 | 0.6544450 | 0.4755490 | 0.9972560 | -0.0523114 | |
| | 5 | 0.1384170 | 0.3453370 | 0.0425084 | 0.2017460 | |
| | 6 | 0.0018580 | -0.0430646 | 0.0287895 | -0.1672140 | |
| | 7 | 0.7133860 | 0.4521800 | 0.0127173 | -0.1120520 | |
| | 8 | 0.0002408 | 0.0155164 | 0.0013963 | 0.0373416 | |
| | 9 | 0.0000016 | 0.0012837 | 0.0000011 | 0.0010646 | |

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REFRACTIVE INDEX M = 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 5.260 | 0 | 0.8864010 | -0.3173240 | 0.4744110 | -0.4993450 |
| | 1 | 0.5229810 | -0.4994720 | 0.8864010 | -0.3173240 |
| | 2 | 0.9948870 | -0.0713240 | 0.5652930 | -0.4957190 |
| | 3 | 0.9019480 | -0.2973860 | 0.9475570 | 0.2229180 |
| | 4 | 0.7546910 | 0.4302700 | 0.9955310 | -0.0667026 |
| | 5 | 0.1829870 | 0.3866560 | 0.1831790 | 0.3868130 |
| | 6 | 0.0001515 | -0.0123070 | 0.0276805 | -0.1640560 |
| | 7 | 0.4925200 | -0.4999440 | 0.0119038 | -0.1084530 |
| | 8 | 0.0003612 | 0.0190023 | 0.0039449 | 0.0626843 |
| | 9 | 0.0000024 | 0.0015562 | 0.0000019 | 0.0013816 |
| 5.320 | 0 | 0.8813120 | -0.3234210 | 0.3610820 | -0.4803140 |
| | 1 | 0.4303090 | -0.4951190 | 0.8813120 | -0.3234210 |
| | 2 | 0.9905520 | -0.0967425 | 0.4915420 | -0.4999280 |
| | 3 | 0.8758170 | -0.3297900 | 0.9615450 | 0.1922930 |
| | 4 | 0.8511760 | 0.3559150 | 0.9942920 | -0.0753365 |
| | 5 | 0.2350730 | 0.4240450 | 0.4685800 | 0.4990120 |
| | 6 | 0.0003801 | 0.0194919 | 0.0259306 | -0.1589280 |
| | 7 | 0.1291740 | -0.3353930 | 0.0114387 | -0.1063380 |
| | 8 | 0.0005492 | 0.0234285 | 0.0173137 | 0.1304380 |
| | 9 | 0.0000035 | 0.0018846 | 0.0000032 | 0.0017996 |
| 5.380 | 0 | 0.8721530 | -0.3339200 | 0.2801720 | -0.4490830 |
| | 1 | 0.3632620 | -0.4809390 | 0.8721530 | -0.3339200 |
| | 2 | 0.9824780 | -0.1312060 | 0.4392300 | -0.4962930 |
| | 3 | 0.8531890 | -0.3539170 | 0.9781050 | 0.1463420 |
| | 4 | 0.9318330 | 0.2520310 | 0.9935600 | -0.0799920 |
| | 5 | 0.2948970 | 0.4559960 | 0.7861570 | 0.4100170 |
| | 6 | 0.0028076 | 0.0529121 | 0.0233559 | -0.1510310 |
| | 7 | 0.0540767 | -0.2261690 | 0.0111910 | -0.1051940 |
| | 8 | 0.0008511 | 0.0291610 | 0.4379690 | 0.4961370 |
| | 9 | 0.0000052 | 0.0022805 | 0.0000056 | 0.0023563 |
| 5.440 | 0 | 0.8569110 | -0.3501640 | 0.2253620 | -0.4178200 |
| | 1 | 0.3166160 | -0.4651560 | 0.8569110 | -0.3501640 |
| | 2 | 0.9676140 | -0.1770240 | 0.4034420 | -0.4905880 |
| | 3 | 0.8339790 | -0.3721000 | 0.9937510 | 0.0788061 |
| | 4 | 0.9840580 | 0.1252490 | 0.9932240 | -0.0820352 |
| | 5 | 0.3624950 | 0.4807210 | 0.9613590 | 0.1927370 |
| | 6 | 0.0078763 | 0.0883981 | 0.0197757 | -0.1392290 |
| | 7 | 0.0282251 | -0.1656150 | 0.0110792 | -0.1046730 |
| | 8 | 0.0013552 | 0.0367888 | 0.0668090 | -0.2496910 |
| | 9 | 0.0000076 | 0.0027584 | 0.0000096 | 0.0031069 |
| | 10 | 0.0000000 | 0.0002239 | 0.0000000 | 0.0001440 |

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REFRACTIVE INDEX M= 2.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|---------|
| 5.500 | 0 | 0.8325720 | -0.3733580 | 0.1892750 | -0.3917270 | |
| | 1 | 0.2850180 | -0.4514230 | 0.8325720 | -0.3733580 | |
| | 2 | 0.9408030 | -0.2359930 | 0.3798070 | -0.4853390 | |
| | 3 | 0.8177010 | -0.3860910 | 0.9997000 | -0.0173199 | |
| | 4 | 0.9998800 | -0.0109389 | 0.9931330 | -0.0825836 | |
| | 5 | 0.4376260 | 0.4960940 | 0.9999870 | -0.0035761 | |
| | 6 | 0.0162055 | 0.1262650 | 0.0150742 | -0.1218480 | |
| | 7 | 0.0161914 | -0.1262110 | 0.0110452 | -0.1045140 | |
| | 8 | 0.0022454 | 0.0473328 | 0.0178834 | -0.1325280 | |
| | 9 | 0.0000111 | 0.0033364 | 0.0000171 | 0.0041359 | |
| 5.560 | 10 | 0.0000001 | 0.0002736 | 0.0000000 | 0.0001853 | |
| | 0 | 0.7945960 | -0.4039970 | 0.1660330 | -0.3721100 | |
| | 1 | 0.2641860 | -0.4408990 | 0.7945960 | -0.4039970 | |
| | 2 | 0.8940440 | -0.3077810 | 0.3649310 | -0.4814110 | |
| | 3 | 0.8036780 | -0.3972150 | 0.9783990 | -0.1453760 | |
| | 4 | 0.9798190 | -0.1406180 | 0.9931260 | -0.0826232 | |
| | 5 | 0.5195870 | 0.4996160 | 0.9810430 | -0.1363740 | |
| | 6 | 0.0285998 | 0.1666790 | 0.0093679 | -0.0963333 | |
| | 7 | 0.0094978 | -0.0969927 | 0.0110424 | -0.1045010 | |
| | 8 | 0.0039516 | 0.0627376 | 0.0096135 | -0.0975761 | |
| 5.620 | 9 | 0.0000163 | 0.0040372 | 0.0000311 | 0.0055780 | |
| | 10 | 0.0000001 | 0.0003337 | 0.0000001 | 0.0002383 | |
| | 0 | 0.7364500 | -0.4405580 | 0.1515050 | -0.3585400 | |
| | 1 | 0.2509530 | -0.4335620 | 0.7364500 | -0.4405580 | |
| | 2 | 0.8168690 | -0.3867740 | 0.3562590 | -0.4788930 | |
| | 3 | 0.7911340 | -0.4064980 | 0.9042980 | -0.2941820 | |
| | 4 | 0.9321990 | -0.2514040 | 0.9930470 | -0.0830970 | |
| | 5 | 0.6069620 | 0.4884250 | 0.9492830 | -0.2194200 | |
| | 6 | 0.0460588 | 0.2096120 | 0.0034516 | -0.0586485 | |
| | 7 | 0.0053573 | -0.0729973 | 0.0110276 | -0.1044320 | |
| 5.680 | 8 | 0.0076695 | 0.0872392 | 0.0067147 | -0.0816676 | |
| | 9 | 0.0000239 | 0.0048900 | 0.0000587 | 0.0076615 | |
| | 10 | 0.0000002 | 0.0004063 | 0.0000001 | 0.0003064 | |

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REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 6.000 | 0 | 0.0079773 | -0.0889587 | 0.1347850 | -0.3414940 |
| | 1 | 0.2298760 | -0.4207530 | 0.0079773 | -0.0889587 |
| | 2 | 0.0361140 | -0.1865740 | 0.3434180 | -0.4748490 |
| | 3 | 0.6819540 | -0.4657180 | 0.0714027 | -0.2574960 |
| | 4 | 0.5595850 | -0.4964370 | 0.9681840 | -0.1755110 |
| | 5 | 0.9984090 | -0.0398502 | 0.8570820 | -0.3499900 |
| | 6 | 0.3603660 | 0.4801070 | 0.9264220 | 0.2610830 |
| | 7 | 0.0041131 | 0.0640017 | 0.0073671 | -0.0855151 |
| | 8 | 0.0119060 | -0.1084630 | 0.0038065 | -0.0615792 |
| | 9 | 0.0003265 | 0.0180662 | 0.0508416 | -0.2196740 |
| | 10 | 0.0000019 | 0.0013735 | 0.0000026 | 0.0016005 |
| | 11 | 0.0000000 | 0.0001119 | 0. | 0. |
| 6.200 | 0 | 0.0515767 | 0.2211710 | 0.1150310 | -0.3190590 |
| | 1 | 0.1912580 | -0.3932920 | 0.0515767 | 0.2211710 |
| | 2 | 0.0005147 | 0.0226814 | 0.2884750 | -0.4530530 |
| | 3 | 0.5052050 | -0.4999730 | 0.0202466 | -0.1408430 |
| | 4 | 0.4545060 | -0.4979260 | 0.8066170 | -0.3949510 |
| | 5 | 0.8114320 | -0.3911650 | 0.8547950 | -0.3523070 |
| | 6 | 0.7003730 | 0.4580950 | 0.8155580 | -0.3878440 |
| | 7 | 0.0283936 | 0.1660950 | 0.0007172 | -0.0267718 |
| | 8 | 0.0015200 | -0.0389581 | 0.0037804 | -0.0613684 |
| | 9 | 0.0021428 | 0.0462409 | 0.0021059 | -0.0458420 |
| | 10 | 0.0000067 | 0.0025978 | 0.0000189 | 0.0043532 |
| | 11 | 0.0000000 | 0.0002161 | 0.0000000 | 0.0001738 |
| 6.400 | 0 | 0.1061610 | 0.3080440 | 0.0435067 | -0.2039950 |
| | 1 | 0.0749347 | -0.2632860 | 0.1061610 | 0.3080440 |
| | 2 | 0.0088496 | 0.0936551 | 0.1192980 | -0.3241390 |
| | 3 | 0.1524610 | -0.3594680 | 0.0131729 | -0.1140150 |
| | 4 | 0.3796580 | -0.4853020 | 0.2010220 | -0.4007640 |
| | 5 | 0.5203010 | -0.4995880 | 0.8488300 | -0.3582140 |
| | 6 | 0.9761700 | 0.1525200 | 0.6748240 | -0.4684410 |
| | 7 | 0.1065770 | 0.3085750 | 0.0399776 | 0.1959070 |
| | 8 | 0.0000122 | 0.0035004 | 0.0034729 | -0.0588288 |
| | 9 | 0.9881330 | -0.1082890 | 0.0013194 | -0.0362998 |
| | 10 | 0.0000252 | 0.0050250 | 0.0003014 | 0.0173590 |
| | 11 | 0.0000002 | 0.0004112 | 0.0000002 | 0.0004051 |
| 6.600 | 0 | 0.1180570 | 0.3226750 | 0.0298814 | 0.1702600 |
| | 1 | 0.0276840 | 0.1640660 | 0.1180570 | 0.3226750 |
| | 2 | 0.0131741 | 0.1140200 | 0.0254533 | 0.1574970 |
| | 3 | 0.0141025 | 0.1179140 | 0.0127561 | -0.1122200 |
| | 4 | 0.2960970 | -0.4565340 | 0.0074008 | 0.0857091 |
| | 5 | 0.3141560 | -0.4641790 | 0.8067820 | -0.3948220 |
| | 6 | 0.9228280 | -0.2668650 | 0.6386640 | -0.4803880 |
| | 7 | 0.3196550 | 0.4663430 | 0.9506390 | 0.2166200 |
| | 8 | 0.0028490 | 0.0532998 | 0.0021245 | -0.0460429 |
| | 9 | 0.0027706 | -0.0525634 | 0.0012166 | -0.0348587 |
| | 10 | 0.0001097 | 0.0104722 | 0.0046992 | -0.0683896 |
| | 11 | 0.0000006 | 0.0007768 | 0.0000010 | 0.0009936 |

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REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 6.800 | 0 | 0.1199360 | 0.3248860 | 0.4544510 | 0.4979210 |
| | 1 | 0.4279260 | 0.4947780 | 0.1199360 | 0.3248860 |
| | 2 | 0.0192468 | 0.1373910 | 0.4039450 | 0.4906870 |
| | 3 | 0.1897620 | 0.3921130 | 0.0079665 | -0.0888993 |
| | 4 | 0.1655970 | -0.3717180 | 0.0787529 | 0.2693530 |
| | 5 | 0.1928600 | -0.3945440 | 0.6256590 | -0.4839520 |
| | 6 | 0.6258250 | -0.4839090 | 0.6344970 | -0.4815710 |
| | 7 | 0.7382550 | 0.4395850 | 0.6259860 | -0.4838670 |
| | 8 | 0.0162829 | 0.1265610 | 0.0000024 | -0.0015428 |
| | 9 | 0.0002770 | -0.0166409 | 0.0012067 | -0.0347160 |
| | 10 | 0.0008084 | 0.0284216 | 0.0005606 | -0.0236712 |
| | 11 | 0.0000022 | 0.0014743 | 0.0000078 | 0.0027913 |
| 7.000 | 0 | 0.1474380 | 0.3545420 | 0.7646240 | 0.4242340 |
| | 1 | 0.6961060 | 0.4599370 | 0.1474380 | 0.3545420 |
| | 2 | 0.0496935 | 0.2173110 | 0.6300450 | 0.4827920 |
| | 3 | 0.3098860 | 0.4624470 | 0.0006490 | 0.0254671 |
| | 4 | 0.0116831 | -0.1074550 | 0.1088640 | 0.3114680 |
| | 5 | 0.1158760 | -0.3200770 | 0.1018680 | -0.3024750 |
| | 6 | 0.3383110 | -0.4731350 | 0.6295770 | -0.4829180 |
| | 7 | 0.9996290 | -0.0192570 | 0.4633270 | -0.4986530 |
| | 8 | 0.0629718 | 0.2429120 | 0.0288871 | 0.1674890 |
| | 9 | 0.0000707 | 0.0084073 | 0.0010583 | -0.0325139 |
| | 10 | 0.0490812 | -0.2160380 | 0.0003873 | -0.0196765 |
| | 11 | 0.0000083 | 0.0028782 | 0.0001706 | 0.0130619 |
| 7.200 | 0 | 0.2814320 | 0.4496980 | 0.8480550 | 0.3589670 |
| | 1 | 0.7718550 | 0.4196370 | 0.2814320 | 0.4496980 |
| | 2 | 0.2115620 | 0.4084160 | 0.6907250 | 0.4621950 |
| | 3 | 0.3594160 | 0.4798290 | 0.1358300 | 0.3426080 |
| | 4 | 0.1350960 | 0.3418260 | 0.1124080 | 0.3158680 |
| | 5 | 0.0553001 | -0.2285650 | 0.1343960 | 0.3410770 |
| | 6 | 0.1533530 | -0.3603270 | 0.5901710 | -0.4918020 |
| | 7 | 0.7673650 | -0.4225120 | 0.4263040 | -0.4945390 |
| | 8 | 0.2219290 | 0.4155440 | 0.9474460 | 0.2231420 |
| | 9 | 0.0016097 | 0.0400883 | 0.0005179 | -0.0227519 |
| | 10 | 0.0005589 | -0.0236342 | 0.0003670 | -0.0191550 |
| | 11 | 0.0000377 | 0.0061400 | 0.0006206 | -0.0249041 |
| | 12 | 0.0000002 | 0.0004398 | 0.0000004 | 0.0006194 |
| 7.400 | 0 | 0.7032970 | 0.4568040 | 0.8620300 | 0.3448680 |
| | 1 | 0.7849090 | 0.4108860 | 0.7032970 | 0.4568040 |
| | 2 | 0.7032850 | 0.4568100 | 0.6979150 | 0.4591620 |
| | 3 | 0.3878320 | 0.4872560 | 0.7032740 | 0.4568150 |
| | 4 | 0.5012500 | 0.4999980 | 0.1179160 | 0.3225090 |
| | 5 | 0.0063207 | -0.0792511 | 0.3702760 | 0.4828790 |
| | 6 | 0.0543225 | -0.2266530 | 0.4362770 | -0.4959230 |
| | 7 | 0.4368780 | -0.4960000 | 0.4216270 | -0.4938200 |
| | 8 | 0.6853790 | 0.4643650 | 0.4375160 | -0.4960800 |
| | 9 | 0.0080282 | 0.0892401 | 0.0000983 | 0.0099165 |
| | 10 | 0.0000346 | -0.0058853 | 0.0003610 | -0.0189965 |
| | 11 | 0.0003355 | 0.0183134 | 0.0001433 | -0.0119701 |
| | 12 | 0.0000007 | 0.0008387 | 0.0000033 | 0.0018239 |

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REFRACTIVE INDEX M= 2.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 7.600 | 0 | 0.9995420 | 0.0214010 | 0.8639340 | 0.3428590 |
| | 1 | 0.7910960 | 0.4065260 | 0.9995420 | 0.0214010 |
| | 2 | 0.9883240 | 0.1074210 | 0.7055150 | 0.4558110 |
| | 3 | 0.4426900 | 0.4967050 | 0.9681230 | 0.1756730 |
| | 4 | 0.7063270 | 0.4554440 | 0.1617810 | 0.3682500 |
| | 5 | 0.0371166 | 0.1890480 | 0.4469120 | 0.4971740 |
| | 6 | 0.0090644 | -0.0947746 | 0.0456073 | -0.2086320 |
| | 7 | 0.2013650 | -0.4010200 | 0.4182770 | -0.4932760 |
| | 8 | 0.9768200 | -0.1504740 | 0.2897890 | -0.4536650 |
| | 9 | 0.0310468 | 0.1734440 | 0.0182156 | 0.1337300 |
| | 10 | 0.0000740 | 0.0086025 | 0.0002952 | -0.0171786 |
| | 11 | 0.0028098 | -0.0529334 | 0.0001086 | -0.0104220 |
| | 12 | 0.0000027 | 0.0016576 | 0.0001308 | 0.0114361 |
| | 13 | 0.0000000 | 0.0001316 | 0.0000000 | 0.0001531 |
| 7.800 | 0 | 0.9343920 | -0.2475950 | 0.8899050 | 0.3130080 |
| | 1 | 0.8335690 | 0.3724670 | 0.9343920 | -0.2475950 |
| | 2 | 0.9910620 | -0.0941158 | 0.7637400 | 0.4247840 |
| | 3 | 0.5955020 | 0.4907950 | 0.9980160 | 0.0444939 |
| | 4 | 0.7878110 | 0.4088580 | 0.3566380 | 0.4790070 |
| | 5 | 0.3432910 | 0.4748080 | 0.4599320 | 0.4983920 |
| | 6 | 0.0019583 | 0.0442088 | 0.3272790 | 0.4692200 |
| | 7 | 0.0642441 | -0.2451870 | 0.3882690 | -0.4873560 |
| | 8 | 0.5799010 | -0.4935750 | 0.2598400 | -0.4385470 |
| | 9 | 0.1212620 | 0.3264310 | 0.9106710 | 0.2852180 |
| | 10 | 0.0007962 | 0.0282066 | 0.0000991 | -0.0099558 |
| | 11 | 0.0000993 | -0.0099645 | 0.0001054 | -0.0102645 |
| | 12 | 0.0000133 | 0.0036528 | 0.0000995 | -0.0099728 |
| | 13 | 0.0000001 | 0.0002493 | 0.0000001 | 0.0003890 |
| 8.000 | 0 | 0.8855560 | -0.3183500 | 0.9695750 | 0.1717520 |
| | 1 | 0.9510660 | 0.2157310 | 0.8855560 | -0.3183500 |
| | 2 | 0.9754980 | -0.1546010 | 0.9260030 | 0.2617660 |
| | 3 | 0.9018850 | 0.2974700 | 0.9997880 | 0.0145444 |
| | 4 | 0.8262160 | 0.3789240 | 0.8676340 | 0.3388880 |
| | 5 | 0.7636510 | 0.4248390 | 0.4627340 | 0.4986090 |
| | 6 | 0.0476486 | 0.2130220 | 0.6873010 | 0.4635930 |
| | 7 | 0.0054338 | -0.0735141 | 0.2748100 | -0.4464190 |
| | 8 | 0.2763010 | -0.4471670 | 0.2559360 | -0.4363860 |
| | 9 | 0.5276020 | 0.4992360 | 0.2779770 | -0.4480020 |
| | 10 | 0.0035763 | 0.0596953 | 0.0001792 | 0.0133848 |
| | 11 | 0.0000016 | -0.0012707 | 0.0001017 | -0.0100828 |
| | 12 | 0.0001631 | 0.0127710 | 0.0000357 | -0.0059763 |
| | 13 | 0.0000002 | 0.0004785 | 0.0000015 | 0.0012263 |

REFRACTIVE INDEX M= 2.000 NOLTR 62-161

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|----|-----------|------------|-----------|------------|
| 8.200 | 0 | 0.8767130 | -0.3287670 | 0.9363680 | -0.2440960 |
| | 1 | 0.9372370 | -0.2425360 | 0.8767130 | -0.3287670 |
| | 2 | 0.9707930 | -0.1683850 | 0.9381230 | -0.2409320 |
| | 3 | 0.9522270 | -0.2132860 | 0.9998420 | 0.0125799 |
| | 4 | 0.8640350 | 0.3427510 | 0.9627350 | -0.1894110 |
| | 5 | 0.9451120 | 0.2277610 | 0.4985620 | 0.4999980 |
| | 6 | 0.2171600 | 0.4123130 | 0.7792310 | 0.4147650 |
| | 7 | 0.0092557 | 0.0957602 | 0.0153773 | -0.1230480 |
| | 8 | 0.1089880 | -0.3116250 | 0.2537790 | -0.4351720 |
| | 9 | 0.9415260 | -0.2346380 | 0.1664800 | -0.3725110 |
| | 10 | 0.0135625 | 0.1156660 | 0.0103721 | 0.1013140 |
| | 11 | 0.0000496 | 0.0070399 | 0.0000748 | -0.0086494 |
| | 12 | 0.0002648 | -0.0162692 | 0.0000294 | -0.0054208 |
| | 13 | 0.0000009 | 0.0009610 | 0.0002493 | 0.0157865 |
| 8.400 | 0 | 0.8380910 | -0.3683670 | 0.2156660 | -0.4112830 |
| | 1 | 0.2727540 | -0.4453750 | 0.8380910 | -0.3683670 |
| | 2 | 0.9233040 | -0.2661080 | 0.3291850 | -0.4699170 |
| | 3 | 0.5821230 | -0.4932100 | 0.9839610 | -0.1256260 |
| | 4 | 0.9999690 | 0.0055765 | 0.7777350 | -0.4157680 |
| | 5 | 0.9994890 | 0.0225982 | 0.9605460 | 0.1946730 |
| | 6 | 0.9318370 | 0.2520260 | 0.7979790 | 0.4015080 |
| | 7 | 0.2114430 | 0.4083320 | 0.9079610 | 0.2890810 |
| | 8 | 0.0013119 | 0.0361967 | 0.1570120 | -0.3638120 |
| | 9 | 0.1582460 | -0.3649710 | 0.1435340 | -0.3506160 |
| | 10 | 0.3085540 | 0.4618960 | 0.1596590 | -0.3662890 |
| | 11 | 0.0014880 | 0.0385454 | 0.0001651 | 0.0128496 |
| | 12 | 0.0000002 | 0.0004042 | 0.0000270 | -0.0051968 |
| | 13 | 0.0001101 | 0.0104914 | 0.0000088 | -0.0029606 |
| | 14 | 0.0000001 | 0.0002740 | 0.0000007 | 0.0008621 |
| 9.000 | 0 | 0.2208890 | -0.4148460 | 0.1392730 | -0.3462310 |
| | 1 | 0.2019440 | -0.4014500 | 0.2208890 | -0.4148460 |
| | 2 | 0.2217630 | -0.4154330 | 0.2721440 | -0.4450640 |
| | 3 | 0.5185590 | -0.4996550 | 0.2226160 | -0.4160020 |
| | 4 | 0.3531310 | -0.4779430 | 0.7651160 | -0.4239260 |
| | 5 | 0.9813620 | -0.1352410 | 0.4534570 | -0.4978290 |
| | 6 | 0.9510190 | -0.2158280 | 0.8848390 | 0.3192170 |
| | 7 | 0.8151890 | 0.3881440 | 0.9776410 | 0.1478490 |
| | 8 | 0.1844600 | 0.3878590 | 0.6525660 | 0.4761550 |
| | 9 | 0.0053195 | -0.0727406 | 0.1289660 | -0.3351620 |
| | 10 | 0.2476500 | -0.4316470 | 0.0763285 | -0.2655230 |
| | 11 | 0.0222582 | 0.1475220 | 0.6674760 | 0.4711180 |
| | 12 | 0.0001518 | 0.0123201 | 0.0000002 | -0.0004592 |
| | 13 | 0.0000019 | -0.0013827 | 0.0000077 | -0.0027666 |
| | 14 | 0.0000019 | 0.0013841 | 0.0000035 | -0.0018657 |
| | 15 | 0. | 0. | 0.0000000 | 0.0001594 |

REFRACTIVE INDEX M= 2.000

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|---------------|----|-----------|------------|-----------|------------|
| 9.400 | 0 | 0.0784642 | 0.2689010 | 0.1030820 | -0.3040660 |
| | 1 | 0.1462040 | -0.3533100 | 0.0784642 | 0.2689010 |
| | 2 | 0.0210340 | 0.1434980 | 0.1985110 | -0.3988790 |
| | 3 | 0.3286970 | -0.4697400 | 0.0005751 | 0.0239741 |
| | 4 | 0.0985068 | -0.2979990 | 0.5132100 | -0.4998250 |
| | 5 | 0.5507890 | -0.4974140 | 0.3250670 | -0.4684000 |
| | 6 | 0.8411940 | -0.3654950 | 0.5995930 | -0.4899810 |
| | 7 | 0.9214490 | -0.2690360 | 0.9816380 | 0.1342570 |
| | 8 | 0.7065560 | 0.4553400 | 0.9908870 | -0.0950257 |
| | 9 | 0.0922386 | 0.2893620 | 0.0000583 | 0.0076345 |
| | 10 | 0.0231203 | -0.1502860 | 0.0739856 | -0.2617480 |
| | 11 | 0.9256910 | -0.2622730 | 0.0432714 | -0.2034670 |
| | 12 | 0.0021297 | 0.0461000 | 0.0027662 | 0.0525219 |
| | 13 | 0.0000126 | 0.0035498 | 0.0000032 | -0.0018042 |
| | 14 | 0.0000038 | -0.0019574 | 0.0000020 | -0.0014064 |
| | 15 | 0.0000001 | 0.0003324 | 0.0000050 | -0.0022309 |
| 9.800 | 0 | 0.1268680 | 0.3328250 | 0.1115480 | 0.3148100 |
| | 1 | 0.1115000 | 0.3147500 | 0.1268680 | 0.3328250 |
| | 2 | 0.0430960 | 0.2030730 | 0.1114520 | 0.3146910 |
| | 3 | 0.0931638 | 0.2906620 | 0.0029708 | 0.0544243 |
| | 4 | 0.0596559 | -0.2368480 | 0.0786687 | 0.2692210 |
| | 5 | 0.0005957 | -0.0243989 | 0.2983030 | -0.4575130 |
| | 6 | 0.6028510 | -0.4893070 | 0.0501165 | -0.2181850 |
| | 7 | 0.6532540 | -0.4759340 | 0.9681950 | -0.1754800 |
| | 8 | 0.9693130 | -0.1724690 | 0.9819240 | -0.1332250 |
| | 9 | 0.5778640 | 0.4939000 | 0.9702970 | -0.1697660 |
| | 10 | 0.0168415 | 0.1286780 | 0.0381833 | -0.1916380 |
| | 11 | 0.0382475 | -0.1917930 | 0.0364427 | -0.1873890 |
| | 12 | 0.0533605 | 0.2247510 | 0.0383154 | -0.1919570 |
| | 13 | 0.0002267 | 0.0150543 | 0.0000685 | 0.0082757 |
| | 14 | 0.0000006 | 0.0007625 | 0.0000016 | -0.0012548 |
| | 15 | 0.0000601 | -0.0077541 | 0.0000005 | -0.0007165 |
| | 16 | 0. | 0. | 0.0000003 | 0.0005810 |
| 10.200 | 0 | 0.1772090 | 0.3818460 | 0.8004030 | 0.3996980 |
| | 1 | 0.7513830 | 0.4322110 | 0.1772090 | 0.3818460 |
| | 2 | 0.1028080 | 0.3037090 | 0.7021060 | 0.4573330 |
| | 3 | 0.4944770 | 0.4999690 | 0.0410040 | 0.1983000 |
| | 4 | 0.0072708 | 0.0849587 | 0.3154830 | 0.4647080 |
| | 5 | 0.0332412 | 0.1792660 | 0.0059090 | -0.0766426 |
| | 6 | 0.0074358 | -0.0859100 | 0.0326057 | -0.1776020 |
| | 7 | 0.4414180 | -0.4965560 | 0.0089095 | -0.0939689 |
| | 8 | 0.5635700 | -0.4959420 | 0.9635780 | -0.1873370 |
| | 9 | 0.9995240 | -0.0218211 | 0.8625070 | -0.3443670 |
| | 10 | 0.3348710 | 0.4719450 | 0.8029310 | 0.3977850 |
| | 11 | 0.0000260 | 0.0051037 | 0.0312654 | -0.1740340 |
| | 12 | 0.0673980 | -0.2507100 | 0.0169036 | -0.1289100 |
| | 13 | 0.0031594 | 0.0561200 | 0.4273570 | 0.4946950 |
| | 14 | 0.0000237 | 0.0048662 | 0.0000010 | 0.0010141 |
| | 15 | 0. | 0. | 0.0000005 | -0.0006900 |
| | 16 | 0. | 0. | 0.0000001 | -0.0003890 |

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Table 5

Real and Imaginary Parts of the Scattering Coefficients
A(N) and B(N) for the Isotropic, Dielectric, Infinite
Circular Cylinder. Refractive Index $m = 3.000$.
Range of Circumference to Wavelength ratio, $x = 2\pi a/\lambda$;
0.100(0.030)3.520
4.000(0.200)5.400

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REFRACTIVE INDEX M= 3.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|-----------|-----------|-----------|
| 0.100 | 0 | -0. | -0. | 0.0048958 | 0.0697987 |
| | 1 | 0. | 0. | 0. | 0. |
| 0.130 | 0 | 0.0000001 | 0.0002289 | 0.0156689 | 0.1241910 |
| | 1 | 0.0001155 | 0.0107470 | 0.0000001 | 0.0002289 |
| 0.160 | 0 | 0.0000003 | 0.0005311 | 0.0406512 | 0.1974810 |
| | 1 | 0.0002672 | 0.0163448 | 0.0000003 | 0.0005311 |
| 0.190 | 0 | 0.0000011 | 0.0010706 | 0.0910613 | 0.2876960 |
| | 1 | 0.0005358 | 0.0231409 | 0.0000011 | 0.0010706 |
| | 2 | 0.0000000 | 0.0001022 | 0. | 0. |
| 0.220 | 0 | 0.0000038 | 0.0019564 | 0.1802410 | 0.3843880 |
| | 1 | 0.0009709 | 0.0311437 | 0.0000038 | 0.0019564 |
| | 2 | 0.0000000 | 0.0001837 | 0. | 0. |
| 0.250 | 0 | 0.0000111 | 0.0033269 | 0.3156220 | 0.4647630 |
| | 1 | 0.0016313 | 0.0403562 | 0.0000111 | 0.0033269 |
| | 2 | 0.0000001 | 0.0003063 | 0. | 0. |
| 0.280 | 0 | 0.0000287 | 0.0053569 | 0.4858970 | 0.4998010 |
| | 1 | 0.0025847 | 0.0507739 | 0.0000287 | 0.0053569 |
| | 2 | 0.0000002 | 0.0004819 | 0. | 0. |
| 0.310 | 0 | 0.0000684 | 0.0082676 | 0.6586500 | 0.4741630 |
| | 1 | 0.0039070 | 0.0623835 | 0.0000684 | 0.0082676 |
| | 2 | 0.0000005 | 0.0007238 | 0. | 0. |
| 0.340 | 0 | 0.0001523 | 0.0123404 | 0.8001770 | 0.3998680 |
| | 1 | 0.0056815 | 0.0751614 | 0.0001523 | 0.0123404 |
| | 2 | 0.0000011 | 0.0010472 | 0. | 0. |
| 0.370 | 0 | 0.0003218 | 0.0179369 | 0.8965380 | 0.3045610 |
| | 1 | 0.0079979 | 0.0890726 | 0.0003218 | 0.0179369 |
| | 2 | 0.0000022 | 0.0014684 | 0. | 0. |
| 0.400 | 0 | 0.0006521 | 0.0255271 | 0.9531040 | 0.2114160 |
| | 1 | 0.0109504 | 0.1040690 | 0.0006521 | 0.0255271 |
| | 2 | 0.0000040 | 0.0020056 | 0.0000000 | 0.0001432 |
| 0.430 | 0 | 0.0012784 | 0.0357315 | 0.9823170 | 0.1317960 |
| | 1 | 0.0146363 | 0.1200920 | 0.0012784 | 0.0357315 |
| | 2 | 0.0000072 | 0.0026785 | 0.0000000 | 0.0002236 |
| 0.460 | 0 | 0.0024444 | 0.0493807 | 0.9953060 | 0.0683508 |
| | 1 | 0.0191542 | 0.1370670 | 0.0024444 | 0.0493807 |
| | 2 | 0.0000123 | 0.0035082 | 0.0000001 | 0.0003394 |
| 0.490 | 0 | 0.0045914 | 0.0676039 | 0.9996130 | 0.0196771 |
| | 1 | 0.0246024 | 0.1549100 | 0.0045914 | 0.0676039 |
| | 2 | 0.0000204 | 0.0045179 | 0.0000002 | 0.0005029 |

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REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|---|-----------|------------|-----------|------------|
| 0.520 | 0 | 0 | 0.0085284 | 0.0919548 | 0.9997170 | -0.0168319 |
| | 1 | 0 | 0.0310772 | 0.1735260 | 0.0085284 | 0.0919548 |
| | 2 | 0 | 0.0000329 | 0.0057323 | 0.0000005 | 0.0007297 |
| 0.550 | 0 | 0 | 0.0157684 | 0.1245780 | 0.9980810 | -0.0437593 |
| | 1 | 0 | 0.0386724 | 0.1928130 | 0.0157684 | 0.1245780 |
| | 2 | 0 | 0.0000515 | 0.0071778 | 0.0000011 | 0.0010394 |
| 0.580 | 0 | 0 | 0.0292055 | 0.1683820 | 0.9959790 | -0.0632812 |
| | 1 | 0 | 0.0474795 | 0.2126620 | 0.0292055 | 0.1683820 |
| | 2 | 0 | 0.0000789 | 0.0088829 | 0.0000021 | 0.0014569 |
| | 3 | 0 | 0.0000000 | 0.0001217 | 0. | 0. |
| 0.610 | 0 | 0 | 0.0545030 | 0.2270080 | 0.9940160 | -0.0771247 |
| | 1 | 0 | 0.0575891 | 0.2329650 | 0.0545030 | 0.2270080 |
| | 2 | 0 | 0.0001183 | 0.0108779 | 0.0000041 | 0.0020136 |
| | 3 | 0 | 0.0000000 | 0.0001644 | 0. | 0. |
| 0.640 | 0 | 0 | 0.1028480 | 0.3037610 | 0.9924370 | -0.0866361 |
| | 1 | 0 | 0.0690938 | 0.2536140 | 0.1028480 | 0.3037610 |
| | 2 | 0 | 0.0001741 | 0.0131954 | 0.0000076 | 0.0027487 |
| | 3 | 0 | 0.0000000 | 0.0002188 | 0. | 0. |
| 0.670 | 0 | 0 | 0.1955090 | 0.3965920 | 0.9913000 | -0.0928687 |
| | 1 | 0 | 0.0820938 | 0.2745080 | 0.1955090 | 0.3965920 |
| | 2 | 0 | 0.0002519 | 0.0158703 | 0.0000138 | 0.0037122 |
| | 3 | 0 | 0.0000001 | 0.0002873 | 0. | 0. |
| 0.700 | 0 | 0 | 0.3655800 | 0.4815920 | 0.9905680 | -0.0966606 |
| | 1 | 0 | 0.0967045 | 0.2955550 | 0.3655800 | 0.4815920 |
| | 2 | 0 | 0.0003588 | 0.0189396 | 0.0000247 | 0.0049668 |
| | 3 | 0 | 0.0000001 | 0.0003728 | 0. | 0. |
| 0.730 | 0 | 0 | 0.6293600 | 0.4829760 | 0.9901620 | -0.0986974 |
| | 1 | 0 | 0.1130680 | 0.3166760 | 0.6293600 | 0.4829760 |
| | 2 | 0 | 0.0005040 | 0.0224434 | 0.0000435 | 0.0065930 |
| | 3 | 0 | 0.0000002 | 0.0004784 | 0. | 0. |
| 0.760 | 0 | 0 | 0.8962330 | 0.3049580 | 0.9899870 | -0.0995603 |
| | 1 | 0 | 0.1313690 | 0.3378030 | 0.8962330 | 0.3049580 |
| | 2 | 0 | 0.0006987 | 0.0264243 | 0.0000756 | 0.0086937 |
| | 3 | 0 | 0.0000004 | 0.0006078 | 0. | 0. |
| 0.790 | 0 | 0 | 0.9999450 | 0.0074356 | 0.9899460 | -0.0997638 |
| | 1 | 0 | 0.1518550 | 0.3588800 | 0.9999450 | 0.0074356 |
| | 2 | 0 | 0.0009575 | 0.0309284 | 0.0001300 | 0.0114026 |
| | 3 | 0 | 0.0000006 | 0.0007649 | 0.0000000 | 0.0001181 |
| 0.820 | 0 | 0 | 0.9401140 | -0.2372760 | 0.9899420 | -0.0997862 |
| | 1 | 0 | 0.1748650 | 0.3798520 | 0.9401140 | -0.2372760 |
| | 2 | 0 | 0.0012981 | 0.0360052 | 0.0002219 | 0.0148950 |
| | 3 | 0 | 0.0000009 | 0.0009544 | 0.0000000 | 0.0001612 |

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REFRACTIVE INDEX M= 3.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 0.850 | 0 | 0.8282790 | -0.3771380 | 0.9898780 | -0.1000960 |
| | 1 | 0.2008720 | 0.4006520 | 0.8282790 | -0.3771380 |
| | 2 | 0.0017426 | 0.0417082 | 0.0003767 | 0.0194048 |
| | 3 | 0.0000014 | 0.0011813 | 0.0000000 | 0.0002179 |
| 0.880 | 0 | 0.7264350 | -0.4457880 | 0.9896560 | -0.1011770 |
| | 1 | 0.2305340 | 0.4211740 | 0.7264350 | -0.4457880 |
| | 2 | 0.0023185 | 0.0480954 | 0.0006379 | 0.0252493 |
| | 3 | 0.0000021 | 0.0014514 | 0.0000001 | 0.0002921 |
| 0.910 | 0 | 0.6480980 | -0.4775640 | 0.9891590 | -0.1035540 |
| | 1 | 0.2647720 | 0.4412120 | 0.6480980 | -0.4775640 |
| | 2 | 0.0030597 | 0.0552300 | 0.0010815 | 0.0328685 |
| | 3 | 0.0000031 | 0.0017709 | 0.0000001 | 0.0003883 |
| 0.940 | 0 | 0.5907740 | -0.4916910 | 0.9882360 | -0.1078220 |
| | 1 | 0.3048780 | 0.4603560 | 0.5907740 | -0.4916910 |
| | 2 | 0.0040079 | 0.0631811 | 0.0018428 | 0.0428878 |
| | 3 | 0.0000046 | 0.0021469 | 0.0000003 | 0.0005124 |
| 0.970 | 0 | 0.5493910 | -0.4975550 | 0.9866700 | -0.1146830 |
| | 1 | 0.3526560 | 0.4777970 | 0.5493910 | -0.4975550 |
| | 2 | 0.0052148 | 0.0720248 | 0.0031711 | 0.0562232 |
| | 3 | 0.0000067 | 0.0025873 | 0.0000004 | 0.0006717 |
| 1.000 | 0 | 0.5196250 | -0.4996150 | 0.9841270 | -0.1249840 |
| | 1 | 0.4105920 | 0.4919410 | 0.5196250 | -0.4996150 |
| | 2 | 0.0067441 | 0.0818452 | 0.0055457 | 0.0742629 |
| | 3 | 0.0000096 | 0.0031005 | 0.0000008 | 0.0008752 |
| 1.030 | 0 | 0.4983000 | -0.4999970 | 0.9800650 | -0.1397770 |
| | 1 | 0.4819830 | 0.4996750 | 0.4983000 | -0.4999970 |
| | 2 | 0.0086753 | 0.0927365 | 0.0099384 | 0.0991950 |
| | 3 | 0.0000137 | 0.0036962 | 0.0000013 | 0.0011343 |
| 1.060 | 0 | 0.4831600 | -0.4997160 | 0.9735840 | -0.1603680 |
| | 1 | 0.5707590 | 0.4949680 | 0.4831600 | -0.4997160 |
| | 2 | 0.0111073 | 0.1048040 | 0.0184627 | 0.1346170 |
| | 3 | 0.0000192 | 0.0043847 | 0.0000021 | 0.0014631 |
| | 4 | 0.0000000 | 0.0001008 | 0. | 0. |
| 1.090 | 0 | 0.4725950 | -0.4992480 | 0.9631650 | -0.1883570 |
| | 1 | 0.6801240 | 0.4664280 | 0.4725950 | -0.4992480 |
| | 2 | 0.0141644 | 0.1181680 | 0.0361492 | 0.1866610 |
| | 3 | 0.0000268 | 0.0051778 | 0.0000035 | 0.0018794 |
| | 4 | 0.0000000 | 0.0001256 | 0. | 0. |
| 1.120 | 0 | 0.4654380 | -0.4988040 | 0.9462110 | -0.2256000 |
| | 1 | 0.8076540 | 0.3941430 | 0.4654370 | -0.4988040 |
| | 2 | 0.0180043 | 0.1329670 | 0.0764130 | 0.2656580 |
| | 3 | 0.0000371 | 0.0060882 | 0.0000058 | 0.0024056 |
| | 4 | 0.0000000 | 0.0001555 | 0. | 0. |

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REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|---------|
| 1.150 | 0 | 0.4608140 | -0.4984620 | 0.9183050 | -0.2738990 | |
| | 1 | 0.9327580 | 0.2504410 | 0.4608140 | -0.4984620 | |
| | 2 | 0.0228290 | 0.1493580 | 0.1796670 | 0.3839100 | |
| | 3 | 0.0000508 | 0.0071300 | 0.0000094 | 0.0030703 | |
| | 4 | 0.0000000 | 0.0001914 | 0. | 0. | |
| 1.180 | 0 | 0.4580520 | -0.4982370 | 0.8720940 | -0.3339850 | |
| | 1 | 0.9995720 | 0.0206955 | 0.4580520 | -0.4982370 | |
| | 2 | 0.0289013 | 0.1675290 | 0.4654190 | 0.4988030 | |
| | 3 | 0.0000692 | 0.0083189 | 0.0000153 | 0.0039099 | |
| | 4 | 0.0000001 | 0.0002343 | 0. | 0. | |
| 1.210 | 0 | 0.4566080 | -0.4981140 | 0.7962090 | -0.4028150 | |
| | 1 | 0.9350420 | -0.2464510 | 0.4566080 | -0.4981140 | |
| | 2 | 0.0365681 | 0.1876990 | 0.9518280 | 0.2141290 | |
| | 3 | 0.0000936 | 0.0096723 | 0.0000247 | 0.0049717 | |
| | 4 | 0.0000001 | 0.0002853 | 0. | 0. | |
| 1.240 | 0 | 0.4560290 | -0.4980630 | 0.6763140 | -0.4678820 | |
| | 1 | 0.7386400 | -0.4393750 | 0.4560290 | -0.4980630 | |
| | 2 | 0.0462967 | 0.2101270 | 0.8329870 | -0.3729870 | |
| | 3 | 0.0001257 | 0.0112094 | 0.0000399 | 0.0063176 | |
| | 4 | 0.0000001 | 0.0003458 | 0. | 0. | |
| 1.270 | 0 | 0.4559120 | -0.4980520 | 0.5040660 | -0.4999830 | |
| | 1 | 0.5066130 | -0.4999560 | 0.4559120 | -0.4980520 | |
| | 2 | 0.0587309 | 0.2351200 | 0.5094100 | -0.4999110 | |
| | 3 | 0.0001678 | 0.0129519 | 0.0000645 | 0.0080299 | |
| | 4 | 0.0000002 | 0.0004171 | 0.0000000 | 0.0001158 | |
| 1.300 | 0 | 0.4558850 | -0.4980500 | 0.2985740 | -0.4576330 | |
| | 1 | 0.3199110 | -0.4664420 | 0.4558850 | -0.4980500 | |
| | 2 | 0.0747801 | 0.2630360 | 0.3367570 | -0.4726010 | |
| | 3 | 0.0002228 | 0.0149237 | 0.0001044 | 0.0102196 | |
| | 4 | 0.0000002 | 0.0005009 | 0.0000000 | 0.0001487 | |
| 1.330 | 0 | 0.4555770 | -0.4980230 | 0.1179360 | -0.3225320 | |
| | 1 | 0.1947110 | -0.3959780 | 0.4555770 | -0.4980230 | |
| | 2 | 0.0957661 | 0.2942700 | 0.2491830 | -0.4325400 | |
| | 3 | 0.0002943 | 0.0171521 | 0.0001701 | 0.0130404 | |
| | 4 | 0.0000004 | 0.0005991 | 0.0000000 | 0.0001902 | |
| 1.360 | 0 | 0.4546040 | -0.4979350 | 0.0181773 | -0.1335920 | |
| | 1 | 0.1168230 | -0.3212090 | 0.4546040 | -0.4979350 | |
| | 2 | 0.1236700 | 0.3292050 | 0.2006060 | -0.4004540 | |
| | 3 | 0.0003870 | 0.0196677 | 0.0002793 | 0.0167093 | |
| | 4 | 0.0000005 | 0.0007136 | 0.0000001 | 0.0002423 | |
| 1.390 | 0 | 0.4525430 | -0.4977430 | 0.0021758 | 0.0465946 | |
| | 1 | 0.0695338 | -0.2543600 | 0.4525430 | -0.4977430 | |
| | 2 | 0.1615590 | 0.3680450 | 0.1714120 | -0.3768690 | |
| | 3 | 0.0005068 | 0.0225056 | 0.0004643 | 0.0215435 | |
| | 4 | 0.0000007 | 0.0008468 | 0.0000001 | 0.0003077 | |

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REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 1.420 | 0 | 0.4489090 | -0.4973830 | 0.0353484 | 0.1846590 | |
| | 1 | 0.0409509 | -0.1981770 | 0.4489090 | -0.4973830 | |
| | 2 | 0.2143200 | 0.4103500 | 0.1528360 | -0.3598290 | |
| | 3 | 0.0006612 | 0.0257060 | 0.0007859 | 0.0280229 | |
| | 4 | 0.0000010 | 0.0010013 | 0.0000001 | 0.0003895 | |
| 1.450 | 0 | 0.4431230 | -0.4967540 | 0.0853267 | 0.2793670 | |
| | 1 | 0.0236693 | -0.1520170 | 0.4431230 | -0.4967540 | |
| | 2 | 0.2898830 | 0.4537080 | 0.1405730 | -0.3475800 | |
| | 3 | 0.0008601 | 0.0293155 | 0.0013642 | 0.0369094 | |
| | 4 | 0.0000014 | 0.0011799 | 0.0000002 | 0.0004917 | |
| 1.480 | 0 | 0.4344670 | -0.4956870 | 0.1347830 | 0.3414920 | |
| | 1 | 0.0132479 | -0.1143350 | 0.4344670 | -0.4956870 | |
| | 2 | 0.4008110 | 0.4900630 | 0.1323140 | -0.3388320 | |
| | 3 | 0.0011160 | 0.0333886 | 0.0024547 | 0.0494841 | |
| | 4 | 0.0000019 | 0.0013858 | 0.0000004 | 0.0006193 | |
| 1.510 | 0 | 0.4220320 | -0.4938840 | 0.1771980 | 0.3818360 | |
| | 1 | 0.0070298 | -0.0835489 | 0.4220320 | -0.4938840 | |
| | 2 | 0.5637870 | 0.4959150 | 0.1267240 | -0.3326640 | |
| | 3 | 0.0014453 | 0.0379903 | 0.0046555 | 0.0680719 | |
| | 4 | 0.0000026 | 0.0016226 | 0.0000006 | 0.0007787 | |
| 1.540 | 0 | 0.4046450 | -0.4908230 | 0.2112350 | 0.4081850 | |
| | 1 | 0.0034096 | -0.0582921 | 0.4046450 | -0.4908230 | |
| | 2 | 0.7827530 | 0.4123720 | 0.1229810 | -0.3284150 | |
| | 3 | 0.0018696 | 0.0431983 | 0.0095664 | 0.0973391 | |
| | 4 | 0.0000036 | 0.0018944 | 0.0000010 | 0.0009775 | |
| 1.570 | 0 | 0.3807760 | -0.4855780 | 0.2375370 | 0.4255740 | |
| | 1 | 0.0014040 | -0.0374439 | 0.3807760 | -0.4855780 | |
| | 2 | 0.9772310 | 0.1491650 | 0.1205460 | -0.3255990 | |
| | 3 | 0.0024174 | 0.0491075 | 0.0224159 | 0.1480320 | |
| | 4 | 0.0000049 | 0.0022055 | 0.0000015 | 0.0012260 | |
| 1.600 | 0 | 0.3484520 | -0.4764800 | 0.2573130 | 0.4371530 | |
| | 1 | 0.0004042 | -0.0201001 | 0.3484520 | -0.4764800 | |
| | 2 | 0.9371800 | -0.2426400 | 0.1190450 | -0.3238420 | |
| | 3 | 0.0031274 | 0.0558358 | 0.0667981 | 0.2496720 | |
| | 4 | 0.0000066 | 0.0025610 | 0.0000024 | 0.0015370 | |
| 1.630 | 0 | 0.3052450 | -0.4605110 | 0.2718000 | 0.4448870 | |
| | 1 | 0.0000306 | -0.0055277 | 0.3052450 | -0.4605110 | |
| | 2 | 0.6515500 | -0.4764800 | 0.1182070 | -0.3228530 | |
| | 3 | 0.0040528 | 0.0635324 | 0.3252390 | 0.4684640 | |
| | 4 | 0.0000088 | 0.0029666 | 0.0000037 | 0.0019270 | |
| 1.660 | 0 | 0.2485870 | -0.4321940 | 0.2820940 | 0.4500190 | |
| | 1 | 0.0000473 | 0.0068774 | 0.2485870 | -0.4321940 | |
| | 2 | 0.3711030 | -0.4831000 | 0.1178160 | -0.3223900 | |
| | 3 | 0.0052681 | 0.0723902 | 0.8636860 | -0.3431220 | |
| | 4 | 0.0000117 | 0.0034284 | 0.0000058 | 0.0024179 | |
| | 5 | 0.0000000 | 0.0001153 | 0. | 0. | |

REFRACTIVE INDEX M= 3.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 1.690 | 0 | 0.1771550 | -0.3818000 | 0.2891160 | 0.4533520 |
| | 1 | 0.0003107 | 0.0176247 | 0.1771550 | -0.3818000 |
| | 2 | 0.1945520 | -0.3958550 | 0.1176950 | -0.3222470 |
| | 3 | 0.0068809 | 0.0826650 | 0.2236940 | -0.4167190 |
| | 4 | 0.0000156 | 0.0039536 | 0.0000092 | 0.0030387 |
| | 5 | 0.0000000 | 0.0001373 | 0. | 0. |
| 1.720 | 0 | 0.0951079 | -0.2933640 | 0.2936310 | 0.4554250 |
| | 1 | 0.0067381 | 0.0271578 | 0.0951079 | -0.2933640 |
| | 2 | 0.0968607 | -0.2957680 | 0.1176850 | -0.3222340 |
| | 3 | 0.0090511 | 0.0947060 | 0.0983883 | -0.2978390 |
| | 4 | 0.0000207 | 0.0045501 | 0.0000147 | 0.0038287 |
| | 5 | 0.0000000 | 0.0001629 | 0. | 0. |
| 1.750 | 0 | 0.0219491 | -0.1465180 | 0.2962800 | 0.4566160 |
| | 1 | 0.0012888 | 0.0358771 | 0.0219491 | -0.1465180 |
| | 2 | 0.0445253 | -0.2062590 | 0.1176330 | -0.3221740 |
| | 3 | 0.0120266 | 0.1090040 | 0.0603112 | -0.2380630 |
| | 4 | 0.0000273 | 0.0052270 | 0.0000234 | 0.0048418 |
| | 5 | 0.0000000 | 0.0001928 | 0. | 0. |
| 1.780 | 0 | 0.0043314 | 0.0656705 | 0.2976060 | 0.4572050 |
| | 1 | 0.0019539 | 0.0441597 | 0.0043314 | 0.0656704 |
| | 2 | 0.0173242 | -0.1304760 | 0.1173870 | -0.3218810 |
| | 3 | 0.0162088 | 0.1262780 | 0.0438537 | -0.2047700 |
| | 4 | 0.0000359 | 0.0059946 | 0.0000379 | 0.0061550 |
| | 5 | 0.0000000 | 0.0002275 | 0. | 0. |
| 1.810 | 0 | 0.0964757 | 0.2979570 | 0.2980860 | 0.4574170 |
| | 1 | 0.0027509 | 0.0523769 | 0.0984757 | 0.2979570 |
| | 2 | 0.0044561 | -0.0666055 | 0.1167820 | -0.3211610 |
| | 3 | 0.0222883 | 0.1476190 | 0.0352536 | -0.1844200 |
| | 4 | 0.0000471 | 0.0068648 | 0.0000621 | 0.0078800 |
| | 5 | 0.0000001 | 0.0002678 | 0.0000000 | 0.0001234 |
| 1.840 | 0 | 0.2979580 | 0.4573610 | 0.2981540 | 0.4574480 |
| | 1 | 0.0037241 | 0.0609114 | 0.2979580 | 0.4573610 |
| | 2 | 0.0001490 | -0.0122064 | 0.1156350 | -0.3197860 |
| | 3 | 0.0315429 | 0.1747800 | 0.0302339 | -0.1712300 |
| | 4 | 0.0000616 | 0.0078510 | 0.0001038 | 0.0101863 |
| | 5 | 0.0000001 | 0.0003143 | 0.0000000 | 0.0001539 |
| 1.870 | 0 | 0.5176510 | 0.4996880 | 0.2982220 | 0.4574770 |
| | 1 | 0.0049490 | 0.0701748 | 0.5176510 | 0.4996880 |
| | 2 | 0.0012117 | 0.0347887 | 0.1137350 | -0.3174900 |
| | 3 | 0.0465709 | 0.2107180 | 0.0271035 | -0.1623850 |
| | 4 | 0.0000805 | 0.0089693 | 0.0001781 | 0.0133429 |
| | 5 | 0.0000001 | 0.0003680 | 0.0000000 | 0.0001916 |

REFRACTIVE INDEX M= 3.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 1.900 | 0 | 0.6892330 | 0.4628080 | 0.2987010 | 0.4576890 |
| | 1 | 0.0065438 | 0.0806285 | 0.6892330 | 0.4628080 |
| | 2 | 0.0058039 | 0.0759616 | 0.1108380 | -0.3139310 |
| | 3 | 0.0733544 | 0.2607170 | 0.0250770 | -0.1563590 |
| | 4 | 0.0001048 | 0.0102381 | 0.0003170 | 0.0178031 |
| | 5 | 0.0000002 | 0.0004299 | 0.0000001 | 0.0002384 |
| 1.930 | 0 | 0.8020910 | 0.3984230 | 0.3000290 | 0.4582700 |
| | 1 | 0.0086886 | 0.0928070 | 0.8020910 | 0.3984230 |
| | 2 | 0.0128185 | 0.1124910 | 0.1066500 | -0.3086680 |
| | 3 | 0.1281910 | 0.3343020 | 0.0237447 | -0.1522530 |
| | 4 | 0.0001364 | 0.0116796 | 0.0005954 | 0.0243936 |
| | 5 | 0.0000002 | 0.0005009 | 0.0000001 | 0.0002964 |
| 1.960 | 0 | 0.8714730 | 0.3346750 | 0.3026910 | 0.4594230 |
| | 1 | 0.0116593 | 0.1073470 | 0.8714730 | 0.3346750 |
| | 2 | 0.0215641 | 0.1452550 | 0.1008240 | -0.3010960 |
| | 3 | 0.2663150 | 0.4420310 | 0.0228727 | -0.1494980 |
| | 4 | 0.0001775 | 0.0133203 | 0.0012122 | 0.0347955 |
| | 5 | 0.0000003 | 0.0005825 | 0.0000001 | 0.0003684 |
| 1.990 | 0 | 0.9135210 | 0.2810700 | 0.3072640 | 0.4613600 |
| | 1 | 0.0158830 | 0.1250230 | 0.9135210 | 0.2810700 |
| | 2 | 0.0315954 | 0.1749200 | 0.0929513 | -0.2903640 |
| | 3 | 0.6858250 | 0.4641870 | 0.0223168 | -0.1477120 |
| | 4 | 0.0002309 | 0.0151926 | 0.0028194 | 0.0530232 |
| | 5 | 0.0000005 | 0.0006759 | 0.0000002 | 0.0004579 |
| 2.020 | 0 | 0.9392370 | 0.2388940 | 0.3144600 | 0.4643010 |
| | 1 | 0.0220315 | 0.1467860 | 0.9392370 | 0.2388940 |
| | 2 | 0.0426206 | 0.2020000 | 0.0825709 | -0.2752330 |
| | 3 | 0.8690430 | -0.3373540 | 0.0219816 | -0.1466230 |
| | 4 | 0.0003006 | 0.0173367 | 0.0084500 | 0.0915347 |
| | 5 | 0.0000006 | 0.0007827 | 0.0000003 | 0.0005696 |
| 2.050 | 0 | 0.9552420 | 0.2067710 | 0.3251980 | 0.4684490 |
| | 1 | 0.0311789 | 0.1738010 | 0.9552420 | 0.2067710 |
| | 2 | 0.0544492 | 0.2269020 | 0.0692233 | -0.2538330 |
| | 3 | 0.2786680 | -0.4483440 | 0.0217995 | -0.1460280 |
| | 4 | 0.0003923 | 0.0198036 | 0.0486182 | 0.2150680 |
| | 5 | 0.0000008 | 0.0009047 | 0.0000005 | 0.0007093 |
| 2.080 | 0 | 0.9653860 | 0.1828010 | 0.3407010 | 0.4739450 |
| | 1 | 0.0450690 | 0.2074550 | 0.9653860 | 0.1828010 |
| | 2 | 0.0669623 | 0.2499570 | 0.0526179 | -0.2232690 |
| | 3 | 0.0935233 | -0.2911640 | 0.0217188 | -0.1457640 |
| | 4 | 0.0005137 | 0.0226594 | 0.6640680 | -0.4723150 |
| | 5 | 0.0000011 | 0.0010439 | 0.0000008 | 0.0008848 |

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REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|---------|
| 2.110 | 0 | 0.9719060 | 0.1652420 | 0.3626470 | 0.4807640 | |
| | 1 | 0.0665636 | 0.2492650 | 0.9719060 | 0.1652420 | |
| | 2 | 0.0800962 | 0.2714420 | 0.0331158 | -0.1789390 | |
| | 3 | 0.0362768 | -0.1869780 | 0.0216967 | -0.1456910 | |
| | 4 | 0.0006760 | 0.0259921 | 0.0414529 | -0.1993350 | |
| | 5 | 0.0000014 | 0.0012026 | 0.0000012 | 0.0011067 | |
| 2.140 | 0 | 0.9761250 | 0.1526580 | 0.3933620 | 0.4884960 | |
| | 1 | 0.1003680 | 0.3004900 | 0.9761250 | 0.1526580 | |
| | 2 | 0.0938336 | 0.2915970 | 0.0130520 | -0.1134970 | |
| | 3 | 0.0142273 | -0.1184270 | 0.0216951 | -0.1456860 | |
| | 4 | 0.0008961 | 0.0299223 | 0.0151543 | -0.1221670 | |
| | 5 | 0.0000019 | 0.0013832 | 0.0000019 | 0.0013893 | |
| 2.170 | 0 | 0.9788430 | 0.1439090 | 0.4360610 | 0.4958950 | |
| | 1 | 0.1540550 | 0.3610010 | 0.9788430 | 0.1439090 | |
| | 2 | 0.1082000 | 0.3106330 | 0.0002493 | -0.0157888 | |
| | 3 | 0.0047737 | -0.0689267 | 0.0216773 | -0.1456280 | |
| | 4 | 0.0012001 | 0.0346220 | 0.0087773 | -0.0932752 | |
| | 5 | 0.0000025 | 0.0015888 | 0.0000031 | 0.0017524 | |
| 2.200 | 0 | 0.9805530 | 0.1380890 | 0.4950350 | 0.4999750 | |
| | 1 | 0.2389470 | 0.4264400 | 0.9805530 | 0.1380890 | |
| | 2 | 0.1232660 | 0.3287420 | 0.0165055 | 0.1274090 | |
| | 3 | 0.0009072 | -0.0301066 | 0.0216056 | -0.1453920 | |
| | 4 | 0.0016305 | 0.0403465 | 0.0062265 | -0.0786623 | |
| | 5 | 0.0000033 | 0.0018226 | 0.0000049 | 0.0022246 | |
| 2.230 | 0 | 0.9815790 | 0.1344690 | 0.5753400 | 0.4942910 | |
| | 1 | 0.3686350 | 0.4824350 | 0.9815790 | 0.1344690 | |
| | 2 | 0.1391460 | 0.3460990 | 0.1113130 | 0.3145190 | |
| | 3 | 0.0000057 | 0.0023856 | 0.0214397 | -0.1448450 | |
| | 4 | 0.0022610 | 0.0474961 | 0.0049442 | -0.0701409 | |
| | 5 | 0.0000044 | 0.0020885 | 0.0000081 | 0.0028480 | |
| 2.260 | 0 | 0.9821370 | 0.1324540 | 0.6807670 | 0.4661800 | |
| | 1 | 0.5491830 | 0.4975750 | 0.9821370 | 0.1324540 | |
| | 2 | 0.1560120 | 0.3628660 | 0.3478420 | 0.4762860 | |
| | 3 | 0.0009606 | 0.0309794 | 0.0211348 | -0.1438340 | |
| | 4 | 0.0032298 | 0.0567396 | 0.0042137 | -0.0647762 | |
| | 5 | 0.0000057 | 0.0023910 | 0.0000136 | 0.0036875 | |
| 2.290 | 0 | 0.9823880 | 0.1315360 | 0.8073180 | 0.3944050 | |
| | 1 | 0.7564390 | 0.4292310 | 0.9823880 | 0.1315360 | |
| | 2 | 0.1740970 | 0.3791930 | 0.6806520 | 0.4662240 | |
| | 3 | 0.0032736 | 0.0571217 | 0.0206401 | -0.1421760 | |
| | 4 | 0.0048249 | 0.0692940 | 0.0037666 | -0.0612568 | |
| | 5 | 0.0000075 | 0.0027353 | 0.0000235 | 0.0048482 | |
| | 6 | 0.0000000 | 0.0001135 | 0. | 0. | |

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REFRACTIVE INDEX M= 3.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 2.320 | 0 | 0.9824600 | 0.1312730 | 0.9303500 | 0.2545570 |
| | 1 | 0.9252280 | 0.2630230 | 0.9824600 | 0.1312730 |
| | 2 | 0.1937150 | 0.3952080 | 0.9191960 | 0.2725330 |
| | 3 | 0.0067237 | 0.0817220 | 0.0198976 | -0.1396480 |
| | 4 | 0.0077406 | 0.0876397 | 0.0034821 | -0.0589069 |
| | 5 | 0.0000098 | 0.0031274 | 0.0000424 | 0.0065119 |
| | 6 | 0.0000000 | 0.0001322 | 0. | 0. |
| 2.350 | 0 | 0.9824650 | 0.1312540 | 0.9979900 | 0.0447900 |
| | 1 | 0.9976400 | 0.0485269 | 0.9824650 | 0.1312540 |
| | 2 | 0.2152820 | 0.4110180 | 0.9972900 | 0.0519885 |
| | 3 | 0.0112302 | 0.1053760 | 0.0188417 | -0.1359660 |
| | 4 | 0.0140605 | 0.1177410 | 0.0032988 | -0.0573402 |
| | 5 | 0.0000128 | 0.0035748 | 0.0000814 | 0.0090219 |
| | 6 | 0.0000000 | 0.0001535 | 0.0000000 | 0.0001080 |
| 2.380 | 0 | 0.9825110 | 0.1310830 | 0.9646470 | -0.1846710 |
| | 1 | 0.9789740 | -0.1434710 | 0.9825110 | 0.1310830 |
| | 2 | 0.2393420 | 0.4266820 | 0.9877220 | -0.1101250 |
| | 3 | 0.0167906 | 0.1284860 | 0.0173995 | -0.1307550 |
| | 4 | 0.0328503 | 0.1782450 | 0.0031818 | -0.0563173 |
| | 5 | 0.0000167 | 0.0040861 | 0.0001720 | 0.0131142 |
| | 6 | 0.0000000 | 0.0001781 | 0.0000000 | 0.0001336 |
| 2.410 | 0 | 0.9827080 | 0.1303580 | 0.8450030 | -0.3619010 |
| | 1 | 0.9135990 | -0.2809550 | 0.9827080 | 0.1303580 |
| | 2 | 0.2666080 | 0.4421860 | 0.9515900 | -0.2146300 |
| | 3 | 0.0234504 | 0.1513290 | 0.0154953 | -0.1235120 |
| | 4 | 0.1527330 | 0.3597300 | 0.0031098 | -0.0556789 |
| | 5 | 0.0000218 | 0.0046722 | 0.0004286 | 0.0206992 |
| | 6 | 0.0000000 | 0.0002062 | 0.0000000 | 0.0001653 |
| 2.440 | 0 | 0.9831680 | 0.1286400 | 0.6975600 | -0.4593150 |
| | 1 | 0.8379980 | -0.3684530 | 0.9831680 | 0.1286400 |
| | 2 | 0.2980150 | 0.4573860 | 0.9137930 | -0.2806690 |
| | 3 | 0.0312885 | 0.1740960 | 0.0130614 | -0.1135370 |
| | 4 | 0.4878640 | -0.4998530 | 0.0030688 | -0.0553122 |
| | 5 | 0.0000286 | 0.0053465 | 0.0015039 | 0.0387507 |
| | 6 | 0.0000001 | 0.0002384 | 0.0000000 | 0.0002049 |
| 2.470 | 0 | 0.9840110 | 0.1254340 | 0.5661620 | -0.4956030 |
| | 1 | 0.7692670 | -0.4213020 | 0.9840110 | 0.1254340 |
| | 2 | 0.3347820 | 0.4719140 | 0.8816000 | -0.3230810 |
| | 3 | 0.0404095 | 0.1969180 | 0.0100672 | -0.0998292 |
| | 4 | 0.0379865 | -0.1911640 | 0.0030488 | -0.0551313 |
| | 5 | 0.0000375 | 0.0061260 | 0.0166796 | 0.1280680 |
| | 6 | 0.0000001 | 0.0002753 | 0.0000001 | 0.0002545 |

REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 2.500 | 0 | 0.9853500 | 0.1201470 | 0.4645230 | -0.4987400 | |
| | 1 | 0.7123570 | -0.4526640 | 0.9853500 | 0.1201470 | |
| | 2 | 0.3784900 | 0.4850110 | 0.8561160 | -0.3509730 | |
| | 3 | 0.0509412 | 0.2198780 | 0.0065887 | -0.0809032 | |
| | 4 | 0.0093458 | -0.0962208 | 0.0030416 | -0.0550668 | |
| | 5 | 0.0000495 | 0.0070330 | 0.0212405 | -0.1441850 | |
| | 6 | 0.0000001 | 0.0003174 | 0.0000001 | 0.0003170 | |
| 2.530 | 0 | 0.9872860 | 0.1120370 | 0.3904080 | -0.4878420 | |
| | 1 | 0.6671170 | -0.4712450 | 0.9872860 | 0.1120370 | |
| | 2 | 0.4311330 | 0.4952350 | 0.8366370 | -0.3696970 | |
| | 3 | 0.0630336 | 0.2430230 | 0.0029775 | -0.0544849 | |
| | 4 | 0.0029780 | -0.0544894 | 0.0030406 | -0.0550580 | |
| | 5 | 0.0000656 | 0.0080974 | 0.0029784 | -0.0544938 | |
| | 6 | 0.0000001 | 0.0003654 | 0.0000002 | 0.0003963 | |
| 2.560 | 0 | 0.9898670 | 0.1001520 | 0.3374920 | -0.4728540 | |
| | 1 | 0.6318250 | -0.4823090 | 0.9898670 | 0.1001520 | |
| | 2 | 0.4950890 | 0.4999760 | 0.8220910 | -0.3824360 | |
| | 3 | 0.0768613 | 0.2663710 | 0.0002879 | -0.0169660 | |
| | 4 | 0.0008795 | -0.0296441 | 0.0030395 | -0.0550481 | |
| | 5 | 0.0000876 | 0.0093604 | 0.0013312 | -0.0364611 | |
| | 6 | 0.0000002 | 0.0004203 | 0.0000002 | 0.0004979 | |
| 2.590 | 0 | 0.9930260 | 0.0832203 | 0.2999220 | -0.4582240 | |
| | 1 | 0.6045570 | -0.4889460 | 0.9930260 | 0.0832203 | |
| | 2 | 0.5728120 | 0.4946700 | 0.8114660 | -0.3911380 | |
| | 3 | 0.0926266 | 0.2899080 | 0.0014109 | 0.0375359 | |
| | 4 | 0.0001443 | -0.0120138 | 0.0030320 | -0.0549805 | |
| | 5 | 0.0001184 | 0.0108816 | 0.0008386 | -0.0289466 | |
| | 6 | 0.0000002 | 0.0004828 | 0.0000004 | 0.0006293 | |
| 2.620 | 0 | 0.9964450 | 0.0595202 | 0.2732930 | -0.4456500 | |
| | 1 | 0.5836150 | -0.4929590 | 0.9964450 | 0.0595202 | |
| | 2 | 0.6658100 | 0.4717070 | 0.8039100 | -0.3970370 | |
| | 3 | 0.1105650 | 0.3135930 | 0.0142566 | 0.1185470 | |
| | 4 | 0.0000041 | 0.0020347 | 0.0030116 | -0.0547950 | |
| | 5 | 0.0001626 | 0.0127513 | 0.0006232 | -0.0249558 | |
| | 6 | 0.0000003 | 0.0005542 | 0.0000006 | 0.0008020 | |
| 2.650 | 0 | 0.9992870 | 0.0266918 | 0.2544900 | -0.4355740 | |
| | 1 | 0.5676120 | -0.4954070 | 0.9992870 | 0.0266918 | |
| | 2 | 0.7721120 | 0.4194700 | 0.7987290 | -0.4009500 | |
| | 3 | 0.1309530 | 0.3373490 | 0.0609713 | 0.2392780 | |
| | 4 | 0.0002011 | 0.0141797 | 0.0029708 | -0.0544245 | |
| | 5 | 0.0002285 | 0.0151139 | 0.0005098 | -0.0225729 | |
| | 6 | 0.0000004 | 0.0006356 | 0.0000011 | 0.0010329 | |

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REFRACTIVE INDEX M= 3.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|
| 2.680 | 0 | 0.9996590 | -0.0184583 | 0.2413440 | -0.4278990 |
| | 1 | 0.5554420 | -0.4969170 | 0.9996590 | -0.0184583 |
| | 2 | 0.8813800 | 0.3233410 | 0.7953630 | -0.4034360 |
| | 3 | 0.1541200 | 0.3610630 | 0.2011820 | 0.4008840 |
| | 4 | 0.0006412 | 0.0253140 | 0.0029019 | -0.0537912 |
| | 5 | 0.0003321 | 0.0182194 | 0.0004437 | -0.0210589 |
| | 6 | 0.0000005 | 0.0007285 | 0.0000018 | 0.0013495 |
| 2.710 | 0 | 0.9935560 | -0.0800148 | 0.2323340 | -0.4223210 |
| | 1 | 0.5462200 | -0.4978590 | 0.9935560 | -0.0800148 |
| | 2 | 0.9692120 | 0.1727420 | 0.7933500 | -0.4049020 |
| | 3 | 0.1804570 | 0.3845670 | 0.5362540 | 0.4986840 |
| | 4 | 0.0012953 | 0.0359670 | 0.0027958 | -0.0528014 |
| | 5 | 0.0005085 | 0.0225449 | 0.0004029 | -0.0200675 |
| | 6 | 0.0000007 | 0.0008346 | 0.0000032 | 0.0017979 |
| 2.740 | 0 | 0.9729230 | -0.1623080 | 0.2263650 | -0.4184780 |
| | 1 | 0.5392280 | -0.4984590 | 0.9729230 | -0.1623080 |
| | 2 | 0.9994530 | -0.0233764 | 0.7923040 | -0.4056580 |
| | 3 | 0.2104380 | 0.4076200 | 0.9306920 | 0.2539760 |
| | 4 | 0.0021653 | 0.0464826 | 0.0026427 | -0.0513397 |
| | 5 | 0.0008496 | 0.0291358 | 0.0003770 | -0.0194135 |
| | 6 | 0.0000009 | 0.0009560 | 0.0000061 | 0.0024628 |
| 2.770 | 0 | 0.9227640 | -0.2669650 | 0.2226290 | -0.4160110 |
| | 1 | 0.5338720 | -0.4988510 | 0.9227640 | -0.2669650 |
| | 2 | 0.9461710 | -0.2256790 | 0.7918920 | -0.4059550 |
| | 3 | 0.2446400 | 0.4298740 | 0.9741220 | -0.1587710 |
| | 4 | 0.0032714 | 0.0571028 | 0.0024324 | -0.0492593 |
| | 5 | 0.0016698 | 0.0408296 | 0.0003607 | -0.0189880 |
| | 6 | 0.0000012 | 0.0010951 | 0.0000124 | 0.0035181 |
| 2.800 | 0 | 0.8197170 | -0.3844230 | 0.2205040 | -0.4145860 |
| | 1 | 0.5296400 | -0.4991210 | 0.8197170 | -0.3844230 |
| | 2 | 0.8207330 | -0.3835760 | 0.7918140 | -0.4060110 |
| | 3 | 0.2837630 | 0.4508230 | 0.8218160 | -0.3826670 |
| | 4 | 0.0046472 | 0.0680120 | 0.0021548 | -0.0463699 |
| | 5 | 0.0047865 | 0.0690188 | 0.0003506 | -0.0187217 |
| | 6 | 0.0000016 | 0.0012548 | 0.0000290 | 0.0053854 |
| 2.830 | 0 | 0.6423120 | -0.4793200 | 0.2194870 | -0.4138990 |
| | 1 | 0.5260770 | -0.4993200 | 0.6423120 | -0.4793200 |
| | 2 | 0.6650220 | -0.4719830 | 0.7917890 | -0.4060280 |
| | 3 | 0.3286500 | 0.4697230 | 0.6823560 | -0.4655600 |
| | 4 | 0.0063382 | 0.0793603 | 0.0018025 | -0.0424180 |
| | 5 | 0.0709000 | 0.2566580 | 0.0003448 | -0.0185669 |
| | 6 | 0.0000021 | 0.0014389 | 0.0000887 | 0.0094188 |

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REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|---------|
| 2.860 | 0 | 0.4056910 | -0.4910250 | 0.2191540 | -0.4136730 | |
| | 1 | 0.5227580 | -0.4994820 | 0.4056910 | -0.4910250 | |
| | 2 | 0.5177980 | -0.4996830 | 0.7915390 | -0.4062080 | |
| | 3 | 0.3803030 | 0.4854610 | 0.5859820 | -0.4925520 | |
| | 4 | 0.0084024 | 0.0912789 | 0.0013751 | -0.0370576 | |
| | 5 | 0.0123824 | -0.1105850 | 0.0003419 | -0.0184885 | |
| | 6 | 0.0000027 | 0.0016519 | 0.0005603 | 0.0236633 | |
| 2.890 | 0 | 0.1841900 | -0.3876390 | 0.2191200 | -0.4136500 | |
| | 1 | 0.5192650 | -0.4996290 | 0.1841900 | -0.3876390 | |
| | 2 | 0.3971050 | -0.4892980 | 0.7907720 | -0.4067570 | |
| | 3 | 0.4398540 | 0.4963690 | 0.5216050 | -0.4995330 | |
| | 4 | 0.0109120 | 0.1038890 | 0.0008890 | -0.0298023 | |
| | 5 | 0.0015739 | -0.0396413 | 0.0003408 | -0.0184586 | |
| | 6 | 0.0000036 | 0.0018998 | 0.0124133 | -0.1107210 | |
| 2.920 | 0 | 0.0488784 | -0.2156140 | 0.2190210 | -0.4135830 | |
| | 1 | 0.5151670 | -0.4997700 | 0.0488784 | -0.2156140 | |
| | 2 | 0.3049720 | -0.4603960 | 0.7891630 | -0.4079030 | |
| | 3 | 0.5084620 | 0.4999280 | 0.4780260 | -0.4995170 | |
| | 4 | 0.0139558 | 0.1173070 | 0.0003980 | -0.0199469 | |
| | 5 | 0.0004017 | -0.0200390 | 0.0003406 | -0.0184534 | |
| | 6 | 0.0000048 | 0.0021905 | 0.0004059 | -0.0201418 | |
| 2.950 | 0 | 0.0021554 | -0.0463763 | 0.2184870 | -0.4132190 | |
| | 1 | 0.5099930 | -0.4999000 | 0.0021554 | -0.0463763 | |
| | 2 | 0.2367600 | -0.4250930 | 0.7863320 | -0.4098950 | |
| | 3 | 0.5870270 | 0.4923680 | 0.4479700 | -0.4972850 | |
| | 4 | 0.0176438 | 0.1316530 | 0.0000413 | -0.0064294 | |
| | 5 | 0.0001026 | -0.0101280 | 0.0003406 | -0.0184510 | |
| | 6 | 0.0000064 | 0.0025349 | 0.0001494 | -0.0122232 | |
| 2.980 | 0 | 0.0074203 | 0.0858212 | 0.2171270 | -0.4122900 | |
| | 1 | 0.5032100 | -0.4999900 | 0.0074203 | 0.0858212 | |
| | 2 | 0.1866700 | -0.3896470 | 0.7818050 | -0.4130200 | |
| | 3 | 0.6755260 | 0.4681780 | 0.4269550 | -0.4946360 | |
| | 4 | 0.0221123 | 0.1470490 | 0.0001543 | 0.0124196 | |
| | 5 | 0.0000131 | -0.0036185 | 0.0003398 | -0.0184296 | |
| | 6 | 0.0000087 | 0.0029482 | 0.0000873 | -0.0093442 | |
| 3.010 | 0 | 0.0333043 | 0.1794300 | 0.2145110 | -0.4104820 | |
| | 1 | 0.4941840 | -0.4999660 | 0.0333043 | 0.1794300 | |
| | 2 | 0.1497560 | -0.3568320 | 0.7749710 | -0.4176010 | |
| | 3 | 0.7716760 | 0.4197530 | 0.4121800 | -0.4922270 | |
| | 4 | 0.0275310 | 0.1636250 | 0.0015516 | 0.0393603 | |
| | 5 | 0.0000019 | 0.0013764 | 0.0003374 | -0.0183665 | |
| | 6 | 0.0000019 | 0.0034532 | 0.0000624 | -0.0079016 | |
| | 7 | 0.0000000 | 0.0001467 | 0.0000000 | 0.0002267 | |

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REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|---|-----------|------------|-----------|------------|
| 3.040 | 0 | 0 | 0.0633270 | 0.2435500 | 0.2101460 | -0.4074120 |
| | 1 | 0 | 0.4821410 | -0.4996810 | 0.0633270 | 0.2435500 |
| | 2 | 0 | 0.1222870 | -0.3276170 | 0.7650030 | -0.4239970 |
| | 3 | 0 | 0.8685840 | 0.3378550 | 0.4018300 | -0.4902680 |
| | 4 | 0 | 0.0341143 | 0.1815230 | 0.0063173 | 0.0792298 |
| | 5 | 0 | 0.0000317 | 0.0056268 | 0.0003327 | -0.0182360 |
| | 6 | 0 | 0.0000167 | 0.0040863 | 0.0000499 | -0.0070669 |
| 3.070 | 7 | 0 | 0.0000000 | 0.0001686 | 0.0000001 | 0.0002917 |
| | 0 | 0 | 0.0907641 | 0.2872730 | 0.2034600 | -0.4025720 |
| | 1 | 0 | 0.4661040 | -0.4988500 | 0.0907641 | 0.2872730 |
| | 2 | 0 | 0.1015840 | -0.3021000 | 0.7507430 | -0.4325830 |
| | 3 | 0 | 0.9517070 | 0.2143850 | 0.3946850 | -0.4887830 |
| | 4 | 0 | 0.0421341 | 0.2008950 | 0.0202928 | 0.1410000 |
| | 5 | 0 | 0.0000905 | 0.0095119 | 0.0003244 | -0.0180091 |
| 3.100 | 6 | 0 | 0.0000241 | 0.0049082 | 0.0000429 | -0.0065469 |
| | 7 | 0 | 0.0000000 | 0.0001935 | 0.0000001 | 0.0003805 |
| | 0 | 0 | 0.1135430 | 0.3172560 | 0.1937820 | -0.3952600 |
| | 1 | 0 | 0.4448270 | -0.4969470 | 0.1135430 | 0.3172560 |
| | 2 | 0 | 0.0857542 | -0.2800010 | 0.7305200 | -0.4436900 |
| | 3 | 0 | 0.9975680 | 0.0492557 | 0.3898920 | -0.4877250 |
| | 4 | 0 | 0.0519407 | 0.2219070 | 0.0621927 | 0.2415050 |
| 3.130 | 5 | 0 | 0.0001755 | 0.0132462 | 0.0003117 | -0.0176511 |
| | 6 | 0 | 0.0000364 | 0.0060321 | 0.0000386 | -0.0062109 |
| | 7 | 0 | 0.0000000 | 0.0002221 | 0.0000003 | 0.0005062 |
| | 0 | 0 | 0.1314990 | 0.3379460 | 0.1803300 | -0.3844620 |
| | 1 | 0 | 0.4167050 | -0.4930130 | 0.1314990 | 0.3379460 |
| | 2 | 0 | 0.0734608 | -0.2608910 | 0.7018670 | -0.4574380 |
| | 3 | 0 | 0.9799640 | -0.1401220 | 0.3868290 | -0.4870240 |
| 3.160 | 4 | 0 | 0.0639906 | 0.2447360 | 0.2013900 | 0.4010390 |
| | 5 | 0 | 0.0002879 | 0.0169655 | 0.0002932 | -0.0171199 |
| | 6 | 0 | 0.0000592 | 0.0076970 | 0.0000359 | -0.0059913 |
| | 7 | 0 | 0.0000001 | 0.0002549 | 0.0000005 | 0.0006922 |
| | 0 | 0 | 0.1451500 | 0.3522520 | 0.1622270 | -0.3686590 |
| | 1 | 0 | 0.3797090 | -0.4853140 | 0.1451500 | 0.3522520 |
| | 2 | 0 | 0.0637509 | -0.2443090 | 0.6610800 | -0.4733430 |
| 3.190 | 3 | 0 | 0.8867580 | -0.3168880 | 0.3850260 | -0.4866010 |
| | 4 | 0 | 0.0788871 | 0.2695630 | 0.6482110 | 0.4775290 |
| | 5 | 0 | 0.0004314 | 0.0207652 | 0.0002678 | -0.0163627 |
| | 6 | 0 | 0.0001106 | 0.0105156 | 0.0000342 | -0.0058496 |
| | 7 | 0 | 0.0000001 | 0.0002926 | 0.0000010 | 0.0009865 |
| | 0 | 0 | 0.1551910 | 0.3620870 | 0.1385970 | -0.3455260 |
| | 1 | 0 | 0.3314250 | -0.4707260 | 0.1551910 | 0.3620870 |
| | 2 | 0 | 0.0559370 | -0.2298000 | 0.6026400 | -0.4893520 |
| | 3 | 0 | 0.7345900 | -0.4415510 | 0.3841050 | -0.4863830 |
| | 4 | 0 | 0.0974397 | 0.2965560 | 0.9820080 | -0.1329230 |
| | 5 | 0 | 0.0006114 | 0.0247186 | 0.0002345 | -0.0153127 |
| | 6 | 0 | 0.0002786 | 0.0166892 | 0.0000332 | -0.0057616 |
| | 7 | 0 | 0.0000001 | 0.0003360 | 0.0000023 | 0.0015040 |

REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|---|-----------|------------|-----------|------------|---------|
| 3.220 | 0 | 0.1623090 | 0.3687340 | 0.1088530 | -0.3114540 | |
| | 1 | 0.2694670 | -0.4436830 | 0.1623090 | 0.3687340 | |
| | 2 | 0.0495136 | -0.2169380 | 0.5187860 | -0.4996470 | |
| | 3 | 0.5611750 | -0.4962430 | 0.3837540 | -0.4862990 | |
| | 4 | 0.1207510 | 0.3258380 | 0.6332110 | -0.4819280 | |
| | 5 | 0.0008352 | 0.0288877 | 0.0001928 | -0.0138832 | |
| | 6 | 0.0020103 | 0.0447913 | 0.0000326 | -0.0057109 | |
| 3.250 | 7 | 0.0000001 | 0.0003861 | 0.0000068 | 0.0026083 | |
| | 0 | 0.1671180 | 0.3730810 | 0.0734605 | -0.2608910 | |
| | 1 | 0.1929810 | -0.3946380 | 0.1671180 | 0.3730810 | |
| | 2 | 0.0441015 | -0.2053210 | 0.4007710 | -0.4900550 | |
| | 3 | 0.4013000 | -0.4901620 | 0.3836930 | -0.4862850 | |
| | 4 | 0.1503450 | 0.3574100 | 0.4018600 | -0.4902740 | |
| | 5 | 0.0011120 | 0.0333288 | 0.0001430 | -0.0119593 | |
| 3.280 | 6 | 0.0021836 | -0.0466775 | 0.0000323 | -0.0056855 | |
| | 7 | 0.0000002 | 0.0004443 | 0.0000405 | 0.0063632 | |
| | 0 | 0.1701510 | 0.3757650 | 0.0357627 | -0.1856980 | |
| | 1 | 0.1067290 | -0.3087680 | 0.1701510 | 0.3757650 | |
| | 2 | 0.0394096 | -0.1945670 | 0.2469210 | -0.4312200 | |
| | 3 | 0.2724750 | -0.4452330 | 0.3836650 | -0.4862780 | |
| | 4 | 0.1883540 | 0.3909950 | 0.2908170 | -0.4541390 | |
| 3.310 | 5 | 0.0014535 | 0.0380968 | 0.0000881 | -0.0093856 | |
| | 6 | 0.0001624 | -0.0127442 | 0.0000322 | -0.0056761 | |
| | 7 | 0.0000003 | 0.0005121 | 0.0017644 | -0.0419673 | |
| | 0 | 0.1718680 | 0.3772650 | 0.0057627 | -0.0756934 | |
| | 1 | 0.0293323 | -0.1687360 | 0.1718680 | 0.3772650 | |
| | 2 | 0.0352088 | -0.1843070 | 0.0862596 | -0.2807470 | |
| | 3 | 0.1770690 | -0.3817270 | 0.3834090 | -0.4862170 | |
| 3.340 | 4 | 0.2377740 | 0.4257200 | 0.2322430 | -0.4222630 | |
| | 5 | 0.0018739 | 0.0432478 | 0.0000354 | -0.0059465 | |
| | 6 | 0.0000355 | -0.0059557 | 0.0000322 | -0.0056746 | |
| | 7 | 0.0000004 | 0.0005918 | 0.0000356 | -0.0059656 | |
| | 0 | 0.1726700 | 0.3779610 | 0.0058192 | 0.0760617 | |
| | 1 | 0.0008835 | 0.0297110 | 0.1726700 | 0.3779610 | |
| | 2 | 0.0313148 | -0.1741670 | 0.0007888 | -0.0280737 | |
| 3.370 | 3 | 0.1101030 | -0.3130180 | 0.3826560 | -0.4860350 | |
| | 4 | 0.3027790 | 0.4594600 | 0.1981190 | -0.3985820 | |
| | 5 | 0.0023912 | 0.0488419 | 0.0000018 | -0.0013329 | |
| | 6 | 0.0000077 | -0.0027776 | 0.0000322 | -0.0056736 | |
| | 7 | 0.0000005 | 0.0006863 | 0.0000127 | -0.0035571 | |
| | 0 | 0.1729150 | 0.3781740 | 0.0714789 | 0.2576230 | |
| | 1 | 0.0668983 | 0.2498460 | 0.1729150 | 0.3781740 | |
| | 2 | 0.0275770 | -0.1637570 | 0.0620010 | 0.2411570 | |
| | 3 | 0.0648649 | -0.2462870 | 0.3811070 | -0.4856590 | |
| | 4 | 0.3889130 | 0.4875030 | 0.1767730 | -0.3814770 | |
| | 5 | 0.0030282 | 0.0549455 | 0.0000241 | 0.0049126 | |
| | 6 | 0.0000006 | -0.0007475 | 0.0000321 | -0.0056658 | |
| | 7 | 0.0000006 | 0.0007999 | 0.0000073 | -0.0027036 | |

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REFRACTIVE INDEX M= 3.000

| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|--------------|---|-----------|------------|-----------|------------|
| 3.400 | 0 | 0.1729350 | 0.3781910 | 0.2283070 | 0.4197410 |
| | 1 | 0.2269680 | 0.4188720 | 0.1729350 | 0.3781910 |
| | 2 | 0.0238732 | -0.1526540 | 0.2256850 | 0.4180330 |
| | 3 | 0.0353754 | -0.1847270 | 0.3784160 | -0.4849920 |
| | 4 | 0.5025120 | 0.4999940 | 0.1627780 | -0.3691630 |
| | 5 | 0.0038133 | 0.0616339 | 0.0001822 | 0.0134978 |
| | 6 | 0.0000006 | 0.0007990 | 0.0000318 | -0.0056432 |
| | 7 | 0.0000009 | 0.0009389 | 0.0000052 | -0.0022804 |
| 3.430 | 0 | 0.1730490 | 0.3782900 | 0.4480430 | 0.4972930 |
| | 1 | 0.4205830 | 0.4936530 | 0.1730490 | 0.3782900 |
| | 2 | 0.0201104 | -0.1403780 | 0.3973090 | 0.4893410 |
| | 3 | 0.0170196 | -0.1293440 | 0.3741700 | -0.4839080 |
| | 4 | 0.6472930 | 0.4778130 | 0.1533360 | -0.3603110 |
| | 5 | 0.0047831 | 0.0689944 | 0.0006546 | 0.0255760 |
| | 6 | 0.0000045 | 0.0021185 | 0.0000313 | -0.0055973 |
| | 7 | 0.0000012 | 0.0011132 | 0.0000041 | -0.0020374 |
| 3.460 | 0 | 0.1735820 | 0.3787500 | 0.6577040 | 0.4744780 |
| | 1 | 0.5884610 | 0.4921120 | 0.1735820 | 0.3787500 |
| | 2 | 0.0162321 | -0.1263670 | 0.5318790 | 0.4989830 |
| | 3 | 0.0064543 | -0.0800787 | 0.3678540 | -0.4822210 |
| | 4 | 0.8134790 | 0.3895270 | 0.1468820 | -0.3539880 |
| | 5 | 0.0059849 | 0.0771302 | 0.0018660 | 0.0431565 |
| | 6 | 0.0000111 | 0.0033339 | 0.0000305 | -0.0055182 |
| | 7 | 0.0000018 | 0.0013394 | 0.0000036 | -0.0018868 |
| | 8 | 0. | 0. | 0.0000000 | 0.0001084 |
| 3.490 | 0 | 0.1748850 | 0.3798690 | 0.8089920 | 0.3930960 |
| | 1 | 0.7108900 | 0.4533490 | 0.1748850 | 0.3798690 |
| | 2 | 0.0122366 | -0.1099400 | 0.6268670 | 0.4836370 |
| | 3 | 0.0013273 | -0.0364085 | 0.3588140 | -0.4796530 |
| | 4 | 0.9569710 | 0.2029230 | 0.1424720 | -0.3495340 |
| | 5 | 0.0074804 | 0.0861654 | 0.0049318 | 0.0700534 |
| | 6 | 0.0000204 | 0.0045135 | 0.0000291 | -0.0053939 |
| | 7 | 0.0000027 | 0.0016486 | 0.0000032 | -0.0017902 |
| | 8 | 0. | 0. | 0.0000000 | 0.uuu1446 |
| 3.520 | 0 | 0.1777610 | 0.3819740 | 0.9007000 | 0.2990640 |
| | 1 | 0.7935630 | 0.4047480 | 0.1773610 | 0.3319740 |
| | 2 | 0.0082127 | -0.0902512 | 0.6919840 | 0.4616730 |
| | 3 | 0.0000055 | 0.0023460 | 0.3462010 | -0.4757580 |
| | 4 | 0.9953520 | -0.0680144 | 0.1395060 | -0.3464740 |
| | 5 | 0.0093519 | 0.0962518 | 0.0132580 | 0.1143780 |
| | 6 | 0.0000325 | 0.0057004 | 0.0000271 | -0.0052104 |
| | 7 | 0.0000044 | 0.0021067 | 0.0000030 | -0.0017275 |
| | 8 | 0. | 0. | 0.0000000 | 0.0001988 |

REFRACTIVE INDEX M= 3.000

| | X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|---------|
| 4.000 | 0 | 0.7734290 | -0.4186130 | 0.9992000 | -0.0282677 | |
| | 1 | 0.9618960 | 0.1914480 | 0.7734290 | -0.4186130 | |
| | 2 | 0.9593610 | -0.1974530 | 0.8351620 | 0.3710350 | |
| | 3 | 0.1681510 | 0.3740000 | 0.9994480 | -0.0234948 | |
| | 4 | 0.0339991 | 0.1812270 | 0.1037220 | -0.3049000 | |
| | 5 | 0.4608770 | -0.4984670 | 0.0374033 | -0.1897480 | |
| | 6 | 0.0020668 | 0.0454150 | 0.0238273 | 0.1525110 | |
| | 7 | 0.0000091 | 0.0030232 | 0.0000012 | -0.0011158 | |
| | 8 | 0.0000338 | 0.0058130 | 0.0000002 | -0.0004549 | |
| | 9 | 0. | 0. | 0.0000001 | 0.0002616 | |
| 4.200 | 0 | 0.3579950 | -0.4794110 | 0.9911510 | -0.0936528 | |
| | 1 | 0.9911740 | 0.0935307 | 0.3579950 | -0.4794110 | |
| | 2 | 0.7888140 | -0.4081500 | 0.9106160 | 0.2852970 | |
| | 3 | 0.6203040 | 0.4853110 | 0.9802840 | -0.1390240 | |
| | 4 | 0.1548930 | 0.3618030 | 0.0311139 | 0.1736260 | |
| | 5 | 0.0028906 | -0.0536864 | 0.0368081 | -0.1882900 | |
| | 6 | 0.0121801 | 0.1096890 | 0.0131646 | -0.1139790 | |
| | 7 | 0.0000494 | 0.0070262 | 0.0000057 | 0.0023825 | |
| | 8 | 0.0000001 | 0.0002292 | 0.0000002 | -0.0004448 | |
| | 9 | 0. | 0. | 0.0000000 | -0.0001474 | |
| 4.400 | 0 | 0.3161740 | -0.4649820 | 0.6098690 | -0.4877790 | |
| | 1 | 0.6335500 | -0.4818340 | 0.3161740 | -0.4649820 | |
| | 2 | 0.7374500 | -0.4400200 | 0.6603150 | -0.4736020 | |
| | 3 | 0.7869360 | -0.4080640 | 0.9785060 | -0.1450250 | |
| | 4 | 0.3768300 | 0.4845920 | 0.8530420 | -0.3540640 | |
| | 5 | 0.0211656 | 0.1439360 | 0.0289200 | -0.1675820 | |
| | 6 | 0.8130570 | -0.3898660 | 0.0082042 | -0.0902048 | |
| | 7 | 0.0002246 | 0.0149850 | 0.0015977 | 0.0399394 | |
| | 8 | 0.0000009 | 0.0009688 | 0.0000001 | -0.0002610 | |
| | 9 | 0.0000009 | -0.0009470 | 0.0000000 | -0.0001212 | |
| | 10 | 0. | 0. | 0.0000000 | 0.0001566 | |
| 4.600 | 0 | 0.3055110 | -0.4606230 | 0.0903532 | 0.2866870 | |
| | 1 | 0.0261113 | 0.1652910 | 0.3055110 | -0.4606230 | |
| | 2 | 0.6759290 | -0.4680270 | 0.0030278 | 0.0549420 | |
| | 3 | 0.3292090 | -0.4699260 | 0.9632620 | -0.1881180 | |
| | 4 | 0.8425230 | 0.3642500 | 0.6994000 | -0.4585190 | |
| | 5 | 0.1172200 | 0.3216820 | 0.0026144 | 0.0510646 | |
| | 6 | 0.0007644 | -0.0276371 | 0.0080120 | -0.0891506 | |
| | 7 | 0.0012295 | 0.0350424 | 0.0027709 | -0.0525660 | |
| | 8 | 0.0000050 | 0.0022391 | 0.0000008 | 0.0009204 | |
| | 9 | 0. | 0. | 0.0000000 | -0.0001170 | |

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| X | N | RE A(N) | IM A(N) | RE B(N) | IM B(N) |
|-------|----|-----------|------------|-----------|------------|
| 4.800 | 0 | 0.1553680 | -0.3622550 | 0.2547610 | 0.4357270 |
| | 1 | 0.1161260 | 0.3203760 | 0.1553680 | -0.3622550 |
| | 2 | 0.3358790 | -0.4722970 | 0.0331100 | 0.1789240 |
| | 3 | 0.2068330 | -0.4064750 | 0.6402480 | -0.4799280 |
| | 4 | 0.6434290 | -0.4789860 | 0.6869870 | -0.4637200 |
| | 5 | 0.3663440 | 0.4823550 | 0.6462460 | -0.4781340 |
| | 6 | 0.0062296 | 0.0786816 | 0.0063391 | -0.0793659 |
| | 7 | 0.1060060 | 0.3078460 | 0.0014643 | -0.0382387 |
| | 8 | 0.0000231 | 0.0048069 | 0.0001386 | 0.0117731 |
| | 9 | 0.0000001 | 0.0003026 | 0. | 0. |
| 5.000 | 0 | 0.4390970 | 0.4962770 | 0.2691910 | 0.4435390 |
| | 1 | 0.1279460 | 0.3340290 | 0.4390970 | 0.4962770 |
| | 2 | 0.3389710 | 0.4733600 | 0.0355771 | 0.1852330 |
| | 3 | 0.1417370 | -0.3487800 | 0.2704200 | 0.4441770 |
| | 4 | 0.0953311 | -0.2936720 | 0.6701060 | -0.4701740 |
| | 5 | 0.9144600 | 0.2796830 | 0.3728670 | -0.4835670 |
| | 6 | 0.0398301 | 0.1955600 | 0.0001865 | 0.0136549 |
| | 7 | 0.0001534 | -0.0123858 | 0.0014171 | -0.0376179 |
| | 8 | 0.0001229 | 0.0110866 | 0.0004786 | -0.0218707 |
| | 9 | 0.0000005 | 0.0006970 | 0.0000001 | 0.0003406 |
| 5.200 | 0 | 0.9790190 | 0.1433200 | 0.3006200 | 0.4585280 |
| | 1 | 0.1663710 | 0.3724140 | 0.9790190 | 0.1433200 |
| | 2 | 0.7828890 | 0.4122790 | 0.0608939 | 0.2391360 |
| | 3 | 0.0247289 | -0.1552980 | 0.5392030 | 0.4984610 |
| | 4 | 0.0076574 | -0.0871707 | 0.4614280 | -0.4985100 |
| | 5 | 0.4966070 | -0.4999880 | 0.3527270 | -0.4778190 |
| | 6 | 0.1701390 | 0.3757550 | 0.5580400 | -0.4966200 |
| | 7 | 0.0012430 | 0.0352458 | 0.0011193 | -0.0334379 |
| | 8 | 0.0039530 | 0.0627549 | 0.0002186 | -0.0147832 |
| | 9 | 0.0000023 | 0.0015100 | 0.0000134 | 0.0036661 |
| 5.400 | 0 | 0.9961880 | 0.0616234 | 0.6555220 | 0.4751980 |
| | 1 | 0.5902110 | 0.4917950 | 0.9961880 | 0.0616234 |
| | 2 | 0.8414920 | 0.3652160 | 0.5111540 | 0.4998760 |
| | 3 | 0.5091210 | 0.4999170 | 0.5625030 | 0.4960780 |
| | 4 | 0.0027133 | 0.0520190 | 0.5069400 | 0.4999520 |
| | 5 | 0.0257791 | -0.1584760 | 0.3461420 | -0.4757390 |
| | 6 | 0.7841660 | 0.4113990 | 0.1610900 | -0.3676140 |
| | 7 | 0.0081203 | 0.0897460 | 0.0000179 | 0.0042337 |
| | 8 | 0.0000226 | -0.0047582 | 0.0002099 | -0.0144861 |
| | 9 | 0.0000121 | 0.0034813 | 0.0000684 | -0.0082708 |
| | 10 | 0.0000000 | 0.0002131 | 0.0000000 | 0.0001219 |

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| Scattering | | | SCAT 7090 | | | | |
| Light | | | LIGT Computer | | | | |
| Dielectric | | | DIEL Program | | | | |
| Cylinders | | | CYLI Tables | | | | |
| Normal | | | NORM Measurements | | | | |
| Incidence | | | INCD | | | | |
| Coefficients | | | COEF | | | | |
| Refractive index | | | REFT | | | | |
| Electromagnetic | | | ELEM | | | | |
| Radiation | | | RADI | | | | |
| Isotropic | | | ISOR | | | | |
| IBM | | | IBMA | | | | |

Naval Ordnance Laboratory, White Oak, Md.
(NOL technical report 62-161)
**SCATTERING OF LIGHT AT NORMAL INCIDENCE BY
DIELECTRIC CYLINDERS WITH REFRACTIVE INDEX
IN THE RANGE $m = 1.400$ to $m = 3.00$ — SCATTER-
ING COEFFICIENTS (U)**, by Louis F. Libelo.
24 Sept. 1962. 122p. tables.
For the refractive indexes $m = 1.40, 1.50,$
 $1.60, 2.00$, and 3.00 , tables of complex scat-
tering coefficients are presented. Coeffi-
cients arise in problem of scattering by homo-
geneous, isotropic, dielectric, infinite cir-
cular cylinder of normally incident, linearly
polarized, plane electromagnetic radiation.
Tables contain not only scattering coeffi-
cients for incident plane wave polarized
parallel to cylinder axis, but also those for
incident radiation polarized normal to this
axis.

1. Light -
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2. Light -
Refraction
3. Cylinders,
Dielectric
Radiation,
Electro-
magnetic -
Scattering -
Measurements
5. Measurements
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